

EXAM  **CRAM**

# NCLEX-RN<sup>®</sup>

Fourth Edition



PEARSON IT  
CERTIFICATION

WILDA RINEHART  
DIANN SLOAN  
CLARA HURD

FREE SAMPLE CHAPTER



SHARE WITH OTHERS

**EXAM ✓ CRAM**

**NCLEX-RN<sup>®</sup>**

**Fourth Edition**

**Wilda Rinehart, Diann Sloan, Clara Hurd**

800 East 96th Street, Indianapolis, Indiana 46240 USA

## **NCLEX-RN® Exam Cram, Fourth Edition**

Copyright © 2014 by Pearson Education, Inc.

All rights reserved. No part of this book shall be reproduced, stored in a retrieval system, or transmitted by any means, electronic, mechanical, photocopying, recording, or otherwise, without written permission from the publisher. No patent liability is assumed with respect to the use of the information contained herein. Although every precaution has been taken in the preparation of this book, the publisher and author assume no responsibility for errors or omissions. Nor is any liability assumed for damages resulting from the use of the information contained herein.

ISBN-13: 978-0-7897-5105-8

ISBN-10: 0-7897-5105-4

Library of Congress Control Number: 2013943198

Printed in the United States of America

First Printing: August 2013

### **Trademarks**

All terms mentioned in this book that are known to be trademarks or service marks have been appropriately capitalized. Pearson IT Certification cannot attest to the accuracy of this information. Use of a term in this book should not be regarded as affecting the validity of any trademark or service mark.

NCLEX® is a registered trademark of the National Council of State Boards of Nursing, Inc. (NCSBN), which does not sponsor or endorse this product.

### **Warning and Disclaimer**

Every effort has been made to make this book as complete and as accurate as possible, but no warranty or fitness is implied. The information provided is on an “as is” basis. The author and the publisher shall have neither liability nor responsibility to any person or entity with respect to any loss or damages arising from the information contained in this book or from the use of the CD or programs accompanying it.

### **Bulk Sales**

Pearson IT Certification offers excellent discounts on this book when ordered in quantity for bulk purchases or special sales. For more information, please contact

#### **U.S. Corporate and Government Sales**

**1-800-382-3419**

**corpsales@pearsontechgroup.com**

For sales outside of the U.S., please contact

#### **International Sales**

**international@pearsoned.com**

### **Publisher**

Paul Boger

### **Associate Publisher**

David Dusthimer

### **Acquisitions Editor**

Betsy Brown

### **Senior Development Editor**

Christopher Cleveland

### **Managing Editor**

Sandra Schroeder

### **Project Editor**

Mandie Frank

### **Indexer**

Angie Martin

### **Proofreader**

Dan Knott

### **Technical Editors**

Crystal Berry

Steven M. Picray

### **Publishing Coordinator**

Vanessa Evans

### **Multimedia Developer**

Matt Dial

### **Designer**

Alan Clements

### **Page Layout**

Mary Sudul

# Rinehart and Associates



## Prepare With the Best Rinehart and Associates

For Nursing Students and Nursing Graduates- "Rinehart and Associates' "NCLEX® Review Seminars", a three or four day seminar that provides a complete, comprehensive review of nursing theory and practice with emphasis of the "NEW" NCLEX® test plan.

We will come to your school and conduct a mini-review for you:

"Pharmacology Made Easy", a mini workshop for students reviewing commonly prescribed drugs as well as hints for remembering drug categories and nursing implications.

"Testing for Nursing School and NCLEX® Success", a mini workshop for nursing students to enhance success in nursing school and beyond.

"Fluid and Electrolytes- A Practical Approach", a mini workshop to increase the student's knowledge of Fluid and Electrolytes and Acid Base Disorders.

## **Pass the Licensure Exam the First Time**

For more information on these and other workshops call:

*662-728-4622*

*662-416-3340*

*Visit our web site at [www.nclexreview.net](http://www.nclexreview.net)*

*e-mail [wrinehar@tsixroads.com](mailto:wrinehar@tsixroads.com) or visit [www.nclexreview.net](http://www.nclexreview.net)*

*NCLEX is a registered trademark of the National Council of State Boards of Nursing*

# Contents at a Glance

Introduction	1
Self-Assessment	5
<b>CHAPTER 1</b> Preparing for the National Council Exam for Registered Nurses	7
<b>CHAPTER 2</b> Pharmacology	17
<b>CHAPTER 3</b> Caring for the Client with Disorders of the Respiratory System	45
<b>CHAPTER 4</b> Caring for the Client with Disorders of the Genitourinary System	61
<b>CHAPTER 5</b> Caring for the Client with Disorders of the Hematopoietic System	77
<b>CHAPTER 6</b> Caring for the Client with Disorders of Fluid and Electrolyte Balance and Acid/Base Balance	89
<b>CHAPTER 7</b> Caring for the Client with Burns	105
<b>CHAPTER 8</b> Caring for the Client with Sensorineural Disorders	121
<b>CHAPTER 9</b> Caring for the Client with Cancer	139
<b>CHAPTER 10</b> Caring for the Client with Disorders of the Gastrointestinal System	159
<b>CHAPTER 11</b> Caring for the Client with Disorders of the Musculoskeletal System	187
<b>CHAPTER 12</b> Caring for the Client with Disorders of the Endocrine System	209
<b>CHAPTER 13</b> Caring for the Client with Disorders of the Cardiovascular System	229
<b>CHAPTER 14</b> Caring for the Client with Disorders of the Neurological System	249
<b>CHAPTER 15</b> Caring for the Client with Psychiatric Disorders	273
<b>CHAPTER 16</b> Caring for Maternal/Infant Client	299
<b>CHAPTER 17</b> Caring for Pediatric Client	327
<b>CHAPTER 18</b> Emergency Nursing	365
<b>CHAPTER 19</b> Cultural Practices Influencing Nursing Care	385
<b>CHAPTER 20</b> Legal Issues in Nursing Practice	405
Practice Exam I	421
Practice Exam II	475
Answers to Practice Exam I	529
Answers to Practice Exam II	559

<b>APPENDIX A</b>	Things You Forgot	589
<b>APPENDIX B</b>	Need to Know More?	597
<b>APPENDIX C</b>	Calculations	605
<b>APPENDIX D</b>	Most Prescribed Medications in the United States	609
<b>APPENDIX E</b>	Alphabetical Listing of Nursing Boards in the United States and Protectorates	613
	Index	631

# Table of Contents

<b>Introduction</b> .....	<b>1</b>
Welcome to the NCLEX-RN® Exam Cram .....	1
Taking the Computerized Adaptive Test .....	2
The Cost of the Exam .....	2
How to Prepare for the Exam .....	2
How to Use This Book .....	3
About the Book .....	4
Contact the Authors .....	5
Self-Assessment .....	5
Testing Your Exam Readiness .....	6
<b>Chapter 1:</b>	
<b>Preparing for the National Council Exam for Registered Nurses</b> .....	<b>7</b>
Preparing for the Exam .....	8
The CAT Exam .....	8
Testing Strategies .....	9
Read the Question Carefully .....	10
Look for Keywords .....	10
Watch for Specific Details .....	10
Eliminate Options That Are Clearly Wrong or Incorrect .....	11
Look for Similar Options .....	11
Look for Opposite Answers .....	12
Remember Legalities .....	12
Remember Infection Control .....	12
Exam Prep Questions .....	13
Answer Rationales .....	15
<b>Chapter 2:</b>	
<b>Pharmacology</b> .....	<b>17</b>
Three Areas of Pharmacology .....	18
How Nurses Work with Pharmacology .....	19
Time-released Drugs .....	20

Administering Medications . . . . .	21
The Seven Rights of Administering Medication . . . . .	21
Understanding and Identifying the Various Drugs . . . . .	22
Angiotensin-Converting Enzyme Inhibitors . . . . .	22
Beta Adrenergic Blockers . . . . .	23
Anti-Infectives (Aminoglycosides) . . . . .	25
Benzodiazepines (Anticonvulsants/Antianxiety) . . . . .	26
Phenothiazines (Antipsychotic/Antiemetic) . . . . .	28
Glucocorticoids . . . . .	29
Antivirals . . . . .	31
Cholesterol-Lowering Agents . . . . .	32
Angiotensin Receptor Blockers . . . . .	33
Histamine 2 Antagonists . . . . .	34
Proton Pump Inhibitors . . . . .	36
Anticoagulants . . . . .	37
More Drug Identification Helpers . . . . .	38
Herbals . . . . .	38
Drug Schedules . . . . .	39
Pregnancy Categories for Drugs . . . . .	40
Exam Prep Questions . . . . .	41
Answer Rationales . . . . .	43

**Chapter 3:**  
**Caring for the Client with Disorders of the Respiratory System . . . . . 45**

Chronic Obstructive Pulmonary Disease . . . . .	46
Chronic Bronchitis . . . . .	46
Emphysema . . . . .	46
Asthma . . . . .	47
Acute Respiratory Infections . . . . .	47
Pneumonia . . . . .	48
Pleurisy . . . . .	49
Tuberculosis . . . . .	50
Influenza . . . . .	50
Acute Respiratory Failure . . . . .	51
Acute Respiratory Distress Syndrome . . . . .	51
Pulmonary Embolus . . . . .	52



Emerging Infections . . . . . 53  
    Severe Acute Respiratory Syndrome . . . . . 53  
    Legionnaire’s Disease . . . . . 54  
Diagnostic Tests for Review . . . . . 55  
Pharmacology Categories for Review . . . . . 55  
Exam Prep Questions . . . . . 57  
    Answer Rationales . . . . . 59  
Suggested Readings and Resources . . . . . 60

**Chapter 4:**  
**Caring for the Client with Disorders of the Genitourinary System . . . . . 61**

Acute Glomerulonephritis . . . . . 62  
Chronic Glomerulonephritis . . . . . 63  
End Stage Renal Disease . . . . . 64  
    Peritoneal Dialysis . . . . . 64  
    Hemodialysis . . . . . 64  
    Renal Transplantation . . . . . 65  
Nephrotic Syndrome . . . . . 65  
Urinary Calculi . . . . . 66  
Urinary Tract Infections . . . . . 67  
Genitourinary Disorders . . . . . 67  
    Prostatitis . . . . . 67  
Benign Prostatic Hyperplasia . . . . . 68  
Bladder Cancer . . . . . 69  
Diagnostic Tests for Review . . . . . 70  
Pharmacology Categories for Review . . . . . 70  
Exam Prep Questions . . . . . 72  
    Answer Rationales . . . . . 74  
Suggested Reading and Resources . . . . . 75

**Chapter 5:**  
**Caring for the Client with Disorders of the Hematopoietic System . . . . . 77**

Anemia . . . . . 78  
    Pernicious Anemia . . . . . 78  
    Aplastic Anemia . . . . . 79  
    Sickle Cell Anemia . . . . . 80

Iron Deficiency Anemia . . . . .	80
Cooley's Anemia (Thalassemia Major) . . . . .	81
Hemophilia . . . . .	81
Polycythemia Vera . . . . .	82
Diagnostic Tests for Review . . . . .	83
Pharmacology for Review . . . . .	83
Exam Prep Questions . . . . .	84
Answer Rationales . . . . .	86
Suggested Reading and Resources . . . . .	87

**Chapter 6:**

**Caring for the Client with Disorders of Fluid and Electrolyte Balance and Acid/Base Balance . . . . .**

**89**

Basic Knowledge of Fluid and Electrolyte Balance . . . . .	90
Regulation of pH and Its Effect on Fluid and Electrolytes . . . . .	91
How the Body Regulates pH . . . . .	91
Metabolic Acidosis . . . . .	91
Causes of Metabolic Acidosis . . . . .	91
Symptoms of Metabolic Acidosis . . . . .	92
Care of the Client with Metabolic Acidosis . . . . .	92
Respiratory Acidosis . . . . .	93
Causes of Respiratory Acidosis . . . . .	93
Symptoms of Respiratory Acidosis . . . . .	94
Caring for the Client with Respiratory Acidosis . . . . .	94
Metabolic Alkalosis . . . . .	95
Causes of Metabolic Alkalosis . . . . .	95
Symptoms of Metabolic Alkalosis . . . . .	95
Caring for the Client with Metabolic Alkalosis . . . . .	96
Respiratory Alkalosis . . . . .	96
Symptoms of Respiratory Alkalosis . . . . .	96
Care of the Client with Respiratory Alkalosis . . . . .	97
Normal Electrolyte Values . . . . .	97
Changes Associated with Aging . . . . .	98
Exam Prep Questions . . . . .	100
Answer Rationales . . . . .	102
Suggested Reading and Resources . . . . .	103

**Chapter 7:**

**Caring for the Client with Burns** . . . . . **105**

- Burn Classifications . . . . . 106
  - Burn Measurement with TBSA . . . . . 108
- Nursing Care for Burn Victims . . . . . 109
  - The Emergent Phase . . . . . 110
  - The Intermediate Phase . . . . . 113
  - Dressings for Burns . . . . . 114
  - The Rehabilitative Phase . . . . . 115
- Diagnostic Tests for Review . . . . . 116
- Pharmacology Categories for Review . . . . . 116
- Exam Prep Questions . . . . . 117
  - Answer Rationales . . . . . 119
- Suggested Reading and Resources . . . . . 120

**Chapter 8:**

**Caring for the Client with Sensorineural Disorders** . . . . . **121**

- Disorders of the Eyes . . . . . 122
  - Intraocular Disorders . . . . . 122
  - Retinal Disorders . . . . . 125
  - Refractive Errors . . . . . 127
  - Traumatic Injuries . . . . . 128
- Visual Tests for Review . . . . . 129
- Pharmacology Categories for Review . . . . . 129
- Ear Disorders . . . . . 129
  - Otitis Externa . . . . . 130
  - Otitis Media . . . . . 130
  - Meniere’s Disease . . . . . 130
  - Otosclerosis . . . . . 131
  - Presbycusis . . . . . 131
  - Ear Trauma . . . . . 132
- Assisting Clients with Hearing Loss . . . . . 132
- Diagnostic Tests for Review . . . . . 132
- Pharmacology Categories for Review . . . . . 133
- Exam Prep Questions . . . . . 134
  - Answer Rationales . . . . . 136
- Suggested Reading and Resources . . . . . 137

<b>Chapter 9:</b>	
<b>Caring for the Client with Cancer</b> .....	<b>139</b>
Cancer .....	140
American Cancer Society's Seven Warning Signs of Cancer .....	140
The Four Major Categories of Cancer .....	140
Risk Factors for Specific Cancers .....	141
Cancer Prevention .....	143
Patient Teaching .....	143
Management of the Client with Cancer .....	143
Radiation .....	144
Chemotherapy .....	145
Bone Marrow and Peripheral Stem Cell Transplantation (PSCT) .....	147
Types of Transplants .....	148
Nursing Care After Transplantation .....	148
Hodgkin's Lymphoma .....	149
Diagnosis of Hodgkin's Lymphoma .....	150
Prognosis of Hodgkin's Lymphoma .....	150
Treatment of Hodgkin's Lymphoma .....	150
Diagnostic Tests for Review .....	151
Pharmacology for Review .....	152
Exam Prep Questions .....	154
Answer Rationales .....	156
Suggested Reading and Resources .....	157
<b>Chapter 10:</b>	
<b>Caring for the Client with Disorders of the Gastrointestinal System</b> .....	<b>159</b>
Ulcers .....	160
Types of Ulcers .....	160
Treatment of Ulcers .....	161
Inflammatory Bowel Disorders .....	163
Crohn's Disease (Regional Enteritis) .....	163
Ulcerative Colitis .....	164
Diverticulitis .....	165
Diagnosis of Diverticulitis .....	165
Treatment of Diverticulitis .....	166

Gastroesophageal Reflux Disease (GERD) . . . . . 166

Diseases Associated with the Liver . . . . . 167

    Hepatitis . . . . . 167

    Cirrhosis . . . . . 172

    Pancreatitis . . . . . 174

Cholecystitis/Cholelithiasis . . . . . 176

    Symptoms of Cholecystitis and Cholelithiasis . . . . . 176

    Diagnosis of Cholecystitis/Cholelithiasis . . . . . 177

    Treatment of Cholecystitis . . . . . 177

    Treatment of Cholelithiasis . . . . . 177

Clostridium Difficile . . . . . 178

Food-Borne Illnesses . . . . . 179

Diagnostic Tests for Review . . . . . 180

Pharmacology for Review . . . . . 180

Exam Prep Questions . . . . . 182

    Answer Rationales . . . . . 184

Suggested Reading and Resources . . . . . 185

**Chapter 11:**

**Caring for the Client with Disorders of the Musculoskeletal System . . . . . 187**

    Fractures . . . . . 188

        Treating Fractures . . . . . 188

        Compartment Syndrome . . . . . 191

        Osteomyelitis . . . . . 192

    Osteoporosis . . . . . 193

        Treatment of Osteoporosis . . . . . 194

    Gout . . . . . 195

        Treatment of the Client with Gout . . . . . 195

    Rheumatoid Arthritis . . . . . 195

        Treatment of Rheumatoid Arthritis . . . . . 196

    Musculoskeletal Surgical Procedures . . . . . 197

        Fractured Hip and Hip Replacement . . . . . 197

        Total Knee Replacement . . . . . 198

        Amputations . . . . . 199

Assistive Devices for Ambulation . . . . .	201
Crutches . . . . .	201
Canes . . . . .	202
Walkers . . . . .	202
Diagnostic Tests for Review . . . . .	203
Pharmacology for Review . . . . .	203
Exam Prep Questions . . . . .	205
Answer Rationales . . . . .	207
Suggested Reading and Resources . . . . .	208

**Chapter 12:**  
**Caring for the Client with Disorders of the Endocrine System . . . . . 209**

The Endocrine System . . . . .	210
Pituitary Disorders . . . . .	210
Tumors of the Pituitary . . . . .	211
Thyroid Disorders . . . . .	213
Hypothyroidism . . . . .	213
Hyperthyroidism . . . . .	214
Parathyroid Disorders . . . . .	216
Hypoparathyroidism . . . . .	216
Hyperparathyroidism . . . . .	217
Adrenal Gland Disorders . . . . .	218
Adrenocortical Insufficiency (Addison's Disease) . . . . .	218
Adrenocortical Hypersecretion (Cushing's Syndrome) or Cushing's Disease . . . . .	219
Diabetes Mellitus . . . . .	219
Diagnostic Tests for Review . . . . .	223
Pharmacology Categories for Review . . . . .	223
Exam Prep Questions . . . . .	224
Answer Rationales . . . . .	226
Suggested Reading and Resources . . . . .	227

**Chapter 13:**  
**Caring for the Client with Disorders of the Cardiovascular System . . . . . 229**

Hypertension . . . . .	230
Medications Used to Treat Hypertension . . . . .	231

- Heart Block . . . . . 231
  - Toxicity to Medications . . . . . 233
  - Malfunction of the Conduction System . . . . . 233
- Myocardial Infarction . . . . . 234
  - Diagnosis of Myocardial Infarction . . . . . 235
  - Management of Myocardial Infarction Clients . . . . . 236
- Inflammatory Diseases of the Heart . . . . . 239
  - Infective Endocarditis . . . . . 239
  - Pericarditis . . . . . 239
- Buerger’s Disease . . . . . 240
- Thrombophlebitis . . . . . 240
- Raynaud’s Syndrome . . . . . 241
- Aneurysms . . . . . 241
- Congestive Heart Failure . . . . . 242
  - Diagnostic Tests for Review . . . . . 242
- Pharmacology Categories for Review . . . . . 243
- Exam Prep Questions . . . . . 244
  - Answer Rationales . . . . . 246
- Suggested Reading and Resources . . . . . 247

**Chapter 14:**  
**Caring for the Client with Disorders of the Neurological System . . . . . 249**

- Seizures . . . . . 250
  - Types of Seizures . . . . . 250
  - Treatment of Seizure Clients . . . . . 252
- Status Epilepticus . . . . . 253
- Brain Injuries . . . . . 253
  - Epidural Hematomas . . . . . 254
  - Subdural Hematoma . . . . . 254
  - Treatment of Epidural and Subdural Hematomas . . . . . 254
- Increased Intracranial Pressure . . . . . 255
  - Treatment of ICP . . . . . 257
- Neurological Assessment . . . . . 258
  - Cranial Nerve Assessment . . . . . 258
  - Glasgow Coma Scale . . . . . 259
  - Intracranial Pressure Monitors . . . . . 260

Care of the Client with Intracranial Surgery (Craniotomy) . . . . .	260
Cerebrovascular Accident/Stroke . . . . .	262
Spinal Cord Injury . . . . .	263
Treatment of Spinal Cord Injuries . . . . .	263
Potential Complications with SCI Clients . . . . .	264
Guillain-Barré . . . . .	265
Treating Clients with Guillain-Barré . . . . .	266
Degenerative Neurological Disorders . . . . .	266
Diagnostic Tests for Review . . . . .	267
Pharmacology for Review . . . . .	267
Exam Prep Questions . . . . .	269
Answer Rationales . . . . .	271
Suggested Reading and Resources . . . . .	272

**Chapter 15:**  
**Caring for the Client with Psychiatric Disorders . . . . . 273**

Anxiety-Related Disorders . . . . .	274
Generalized Anxiety Disorder . . . . .	274
Post-traumatic Stress Disorder . . . . .	275
Dissociative Identity Disorder . . . . .	275
Somatoform Disorder . . . . .	276
Panic Disorder . . . . .	276
Phobic Disorders . . . . .	277
Obsessive-Compulsive Disorder . . . . .	277
Personality Disorders . . . . .	278
Cluster A . . . . .	278
Cluster B . . . . .	279
Cluster C . . . . .	280
Managing Clients with Personality Disorders . . . . .	281
Psychotic Disorders . . . . .	282
Schizophrenia . . . . .	282
Bipolar Disorders . . . . .	284
Substance Abuse . . . . .	286
Alcoholism . . . . .	286
Other Commonly Abused Substances . . . . .	288



Disorders of Childhood and Adolescence . . . . . 291

- Conduct Disorder . . . . . 291
- Oppositional Defiant Disorder . . . . . 291
- Attention Deficit Hyperactive Disorder . . . . . 291
- Autistic Disorder . . . . . 292
- Eating Disorders . . . . . 293

Diagnostic Tests for Review . . . . . 293

Pharmacology Categories for Review . . . . . 294

Exam Prep Questions . . . . . 295

- Answer Rationales . . . . . 297

Suggested Reading and Resources . . . . . 298

**Chapter 16:**

**Caring for the Maternal/Infant Client . . . . . 299**

Signs of Pregnancy . . . . . 300

- Presumptive Signs . . . . . 300
- Probable Signs . . . . . 300
- Positive Signs . . . . . 301

Prenatal Care . . . . . 301

- Prenatal Diet and Weight Maintenance . . . . . 301
- Alpha-Fetoprotein Screening . . . . . 301
- Other Prenatal Diagnostic Tests . . . . . 302
- Assessing Fetal Heart Tones . . . . . 303
- Ultrasonography . . . . . 303

Signs of Complications of Pregnancy . . . . . 303

Types of Abortions . . . . . 304

Complications Affecting Pregnancy . . . . . 305

- Diabetes in Pregnancy . . . . . 305
- Preeclampsia . . . . . 306
- Disseminated Intravascular Coagulation . . . . . 307
- Cord Prolapse . . . . . 307
- Abruptio Placenta . . . . . 307
- Placenta Previa . . . . . 307

Maternal Infections . . . . . 308

Preterm Labor . . . . . 310

Intrapartal Care . . . . .	311
Stages of Labor . . . . .	311
Phases of Labor . . . . .	312
Important Terms You Should Know . . . . .	312
Prelabor Testing . . . . .	313
Fetal Monitoring . . . . .	314
Pharmacologic Management of Labor . . . . .	316
Postpartum Care . . . . .	317
Terms Associated with the Normal Newborn . . . . .	317
Rh Incompatibility . . . . .	318
Contraception . . . . .	319
Diagnostic Tests for Review . . . . .	320
Pharmacology Categories for Review . . . . .	321
Exam Prep Questions . . . . .	322
Answer Rationales . . . . .	324
Suggested Reading and Resources . . . . .	325

**Chapter 17:**  
**Caring for the Pediatric Client . . . . . 327**

Growth and Development . . . . .	328
Infant (28 Days to 1 Year) . . . . .	328
Toddler (1–3 Years) . . . . .	330
Preschooler (3–5 Years) . . . . .	331
School Age (6–12 Years) . . . . .	332
Adolescence (12–18 Years) . . . . .	333
Congenital Anomalies . . . . .	334
Anomalies of the Gastrointestinal System . . . . .	334
Anomalies of the Musculoskeletal System . . . . .	338
Anomalies of the Cardiovascular System . . . . .	340
Inborn Errors of Metabolism . . . . .	343
Respiratory Disorders . . . . .	344
Acute Otitis Media . . . . .	345
Tonsillitis . . . . .	346
Laryngotracheobronchitis . . . . .	347
Acute Epiglottitis . . . . .	347

Bronchiolitis . . . . .	348
Cystic Fibrosis (Mucoviscidosis) . . . . .	349
Gastrointestinal Disorders . . . . .	350
Gastroenteritis . . . . .	350
Pyloric Stenosis . . . . .	350
Intussusception . . . . .	351
Celiac (Gluten-Induced Enteropathy, Celiac Sprue) . . . . .	351
Cardiovascular Disorders . . . . .	351
Rheumatic Fever . . . . .	352
Kawasaki's Disease (Mucocutaneous Lymph Node Syndrome) . . . . .	353
Musculoskeletal Disorders . . . . .	354
Scoliosis . . . . .	354
Legg-Calve-Perthes Disease (Coxa Plana) . . . . .	355
Muscular Dystrophies . . . . .	355
Childhood Cancer . . . . .	356
Wilms Tumor (Nephroblastoma) . . . . .	356
Leukemia . . . . .	356
Osteogenic Sarcoma (Osteosarcoma) . . . . .	357
Ingestion of Hazardous Substances . . . . .	357
Salicylate Overdose . . . . .	357
Acetaminophen (Tylenol) Overdose . . . . .	357
Lead (Plumbism) . . . . .	358
Iron Poisoning . . . . .	358
Diagnostic Tests for Review . . . . .	359
Pharmacology Categories for Review . . . . .	359
Exam Prep Questions . . . . .	360
Answer Rationales . . . . .	362
Suggested Reading and Resources . . . . .	363

**Chapter 18:**

<b>Emergency Nursing . . . . .</b>	<b>365</b>
The ABCDs of Emergency Care . . . . .	366
Airway . . . . .	367
Breathing . . . . .	367
Circulation . . . . .	368

Deficits . . . . .	369
Obtaining Client Information . . . . .	369
Trauma . . . . .	370
Head Injuries . . . . .	370
Chest Injuries . . . . .	371
Abdominal Injuries . . . . .	371
Documenting and Protecting Forensic Evidence . . . . .	372
Poisoning . . . . .	373
Poisonous Stings and Bites . . . . .	374
Bioterrorism . . . . .	375
Chemical and Biological Agents . . . . .	375
Nuclear Warfare . . . . .	378
Triage Categories for Disaster Victims . . . . .	379
Diagnostic Tests for Review . . . . .	379
Pharmacology Categories for Review . . . . .	380
Exam Prep Questions . . . . .	381
Answer Rationales . . . . .	383
Suggested Reading and Resources . . . . .	384

<b>Chapter 19:</b>	
<b>Cultural Practices Influencing Nursing Care . . . . .</b>	<b>385</b>
Cultural Assessment . . . . .	386
Understanding Client Beliefs . . . . .	386
Working with Clients Who Speak Different Languages . . . . .	387
Healthcare of Hispanics/Latinos . . . . .	388
Time Considerations . . . . .	389
Use of Nonverbal/Verbal Communication . . . . .	389
Childbirth and Pain Response . . . . .	390
Healthcare of Native Americans and Alaskan Natives . . . . .	390
Time Considerations . . . . .	391
Use of Nonverbal/Verbal Communication . . . . .	391
Childbirth and Pain Response . . . . .	391
Healthcare of Asian-Americans . . . . .	391
Time Considerations . . . . .	393
Use of Nonverbal/Verbal Communication . . . . .	393
Childbirth and Pain Response . . . . .	393

Healthcare of Arab-Americans . . . . . 393  
    Time Considerations . . . . . 394  
    Use of Nonverbal/Verbal Communication . . . . . 394  
    Childbirth and Pain Response . . . . . 394  
Nursing Plan Dietary Considerations Across Cultures . . . . . 395  
Religious Beliefs and Refusal of Care Considerations . . . . . 396  
Exam Prep Questions . . . . . 400  
    Answer Rationales . . . . . 402  
Suggested Reading and Resources . . . . . 403

**Chapter 20:**

**Legal Issues in Nursing Practice . . . . . 405**

Types of Laws . . . . . 406  
    Statutory Laws/Regulatory Laws . . . . . 407  
    Civil Laws . . . . . 407  
    Criminal Laws . . . . . 407  
    Common Law . . . . . 407  
Code of Ethical Behavior in Nursing Practice . . . . . 409  
Legal Theories That Affect Nursing Practice . . . . . 410  
    Negligence . . . . . 410  
    Malpractice . . . . . 410  
    Witnessing Consent for Care . . . . . 411  
    Tort . . . . . 411  
    Assault and Battery . . . . . 411  
    Fraud . . . . . 411  
Managing Client Care . . . . . 411  
Exam Prep Questions . . . . . 417  
    Answers to Exam Questions . . . . . 419  
Suggested Reading and Resources . . . . . 420

**Practice Exam I . . . . . 421**

**Practice Exam II . . . . . 475**

<b>Answers to Practice Exam I</b> .....	<b>529</b>
Answer Rationales .....	531
<b>Answers to Practice Exam II</b> .....	<b>559</b>
Answer Rationales .....	561
<b>Appendix A:</b>	
<b>Things You Forgot</b> .....	<b>589</b>
Therapeutic Drug Levels .....	589
Vital Signs .....	589
Anticoagulant Therapy .....	590
Intrapartal Normal Values .....	590
Standard Precautions .....	591
Airborne Precautions .....	592
Droplet Precautions .....	592
Contact Precautions .....	592
Revised Life Support Guidelines (American Heart Association) .....	592
Defense Mechanisms Often Used by Clients During Stressful Situations .....	593
Nutrition Notes .....	593
Immunization Schedule .....	595
<b>Appendix B:</b>	
<b>Need to Know More?</b> .....	<b>597</b>
Pharmacology .....	597
Care of the Client with Respiratory Disorders .....	597
Care of the Client with Genitourinary Disorders .....	598
Care of the Client with Hematological Disorders .....	598
Fluid and Electrolytes and Acid/Base Balance .....	599
Care of the Client with Burns .....	599
Care of the Client with Sensory Disorders .....	599
Care of the Client with Neoplastic Disorders .....	600
Care of the Client with Gastrointestinal Disorders .....	600
Care of the Client with Musculoskeletal and Connective Tissue Disorder ..	601
Care of the Client with Endocrine Disorders .....	601
Care of the Client with Cardiac Disorders .....	602
Care of the Client with Neurological Disorders .....	602

Care of the Client with Psychiatric Disorders . . . . .	603
Maternal-Newborn Care . . . . .	603
Care of the Pediatric Client . . . . .	603
Cultural Practices Influencing Nursing Care . . . . .	604
Legal Issues in Nursing Practice . . . . .	604
<b>Appendix C:</b>	
<b>Calculations . . . . .</b>	<b>605</b>
The Apothecary System of Measurement . . . . .	605
The Household System of Measurement . . . . .	605
Metric Measurements . . . . .	606
Test Your Math Skills . . . . .	606
Answers . . . . .	607
<b>Appendix D:</b>	
<b>Most-Prescribed Medications in the United States . . . . .</b>	<b>609</b>
<b>Appendix E:</b>	
<b>Alphabetical Listing of Nursing Boards in the United States and Protectorates . . . . .</b>	<b>613</b>
<b>Index . . . . .</b>	<b>631</b>

# About the Authors

**Wilda Rinehart** received an Associate Degree in Nursing from Northeast Mississippi Community College in Booneville, Mississippi. After working as a staff nurse and charge nurse, she became a public health nurse and served in that capacity for a number of years. In 1975, she received her nurse practitioner certification in the area of obstetrics-gynecology from the University of Mississippi Medical Center in Jackson, Mississippi. In 1979, she completed her Bachelor of Science degree in Nursing from Mississippi University for Women. In 1980, she completed her Master of Science degree in Nursing from the same university and accepted a faculty position at Northeast Mississippi Community College, where she taught medical-surgical nursing and maternal-newborn nursing. In 1982, she founded Rinehart and Associates Nursing Consultants. For the past 26 years, she and her associates have worked with nursing graduates and schools of nursing to assist graduates to pass the National Council Licensure Exam for Nursing. She has also worked as a curriculum consultant with faculty to improve test construction. Ms. Rinehart has served as a convention speaker throughout the southeastern United States and as a reviewer of medical-surgical and obstetric texts. She has co-authored materials used in seminars presented by Rinehart and Associates Nursing Review. As the president of Rinehart and Associates, she serves as the coordinator of a company dedicated to improving the quality of health through nursing education.

**Dr. Diann Sloan** received an Associate Degree in Nursing from Northeast Mississippi Community College, a Bachelor of Science degree in Nursing from the University of Mississippi, and a Master of Science degree in Nursing from Mississippi University for Women. In addition to her nursing degrees, she holds a Master of Science in Counseling Psychology from Georgia State University and a Doctor of Philosophy in Counselor Education, with minors in both Psychology and Educational Psychology, from Mississippi State University. She has completed additional graduate studies in healthcare administration at Western New England College and the University of Mississippi. Dr. Sloan has taught pediatric nursing, psychiatric mental health nursing, and medical surgical nursing in both associate degree and baccalaureate nursing programs. As a member of Rinehart and Associates Nursing Review, Dr. Sloan has conducted test construction workshops for faculty and nursing review seminars for both registered and practical nurse graduates. She has co-authored materials used in the item-writing workshops for nursing faculty and Rinehart and Associates Nursing Review. She is a member of Sigma Theta Tau nursing honor society.



**Clara Hurd** received an Associate Degree in Nursing from Northeast Mississippi Community College in Booneville, Mississippi (1975). Her experiences in nursing are clinically based, having served as a staff nurse in medical-surgical nursing. She has worked as an oncology, intensive care, orthopedic, neurological, and pediatric nurse. She received her Bachelor of Science degree in Nursing from the University of North Alabama in Florence, Alabama, and her Master of Science degree in Nursing from the Mississippi University for Women in Columbus, Mississippi. Ms. Hurd is a certified nurse educator. She currently serves as a nurse educator consultant and an independent contractor. Ms. Hurd has taught in both associate degree and baccalaureate degree nursing programs. She was a faculty member of Mississippi University for Women; Austin Peay State University in Clarksville, Tennessee; Tennessee State University in Nashville, Tennessee; and Northeast Mississippi Community College. Ms. Hurd joined Rinehart and Associates in 1993. She has worked with students in preparing for the National Council Licensure Exam and with faculty as a consultant in writing test items. Ms. Hurd has also been a presenter at nursing conventions on various topics, including item-writing for nursing faculty. Her primary professional goal is to prepare the student and graduate for excellence in the delivery of healthcare.

## About the Technical Editors

**Crystal Berry** has B.S.N., R.N., and C.N.M.L. degrees and graduated from the University of North Carolina Wilmington with a bachelor's degree in Nursing. She worked for five years as a burn nurse at the North Carolina Jaycee Burn Center at UNC Hospitals in Chapel Hill, N.C. before becoming a PACU nurse. She is currently working at WakeMed Cary Hospital in Cary, N.C. as a nurse manager of Day Surgery, PACU, and Endoscopy.

**Steven M. Picray** is a medical surgical registered nurse in a major metropolitan hospital. He has also been a Baptist pastor and a computer programmer. He has a bachelor's and master's degrees in Theology, a B.S.N., and is currently pursuing his master's degree in nursing to become a nurse practitioner.

# Dedication

*We would like to thank our families for tolerating our late nights and long hours. Also, thanks to Gene Sloan for his help without pay. Special thanks to all the graduates who have attended Rinehart and Associates Review Seminars. Thanks for allowing us to be a part of your success.*

# Acknowledgments

Our special thanks to our editors, support staff, and nurse reviewers for helping us to organize our thoughts and experiences into a text for students and practicing professionals. You made the task before us challenging and enjoyable.

# We Want to Hear from You!

As the reader of this book, *you* are our most important critic and commentator. We value your opinion and want to know what we're doing right, what we could do better, what areas you'd like to see us publish in, and any other words of wisdom you're willing to pass our way.

We welcome your comments. You can email or write to let us know what you did or didn't like about this book—as well as what we can do to make our books better.

*Please note that we cannot help you with technical problems related to the topic of this book.*

When you write, please be sure to include this book's title and author as well as your name and email address. We will carefully review your comments and share them with the author and editors who worked on the book

Email: [feedback@pearsonitcertification.com](mailto:feedback@pearsonitcertification.com).

Mail: Pearson IT Certification  
ATTN: Reader Feedback  
800 East 96th Street  
Indianapolis, IN 46240 USA

## Reader Services

Visit our website and register this book at [www.pearsonitcertification.com/register](http://www.pearsonitcertification.com/register) for convenient access to any updates, downloads, or errata that might be available for this book.

# Introduction

## Welcome to the NCLEX-RN® Exam Cram

Often when we are studying for a very important exam such as the NCLEX®, we feel overwhelmed by the amount of content there is to master. This book will help you organize your knowledge and get ready to take and pass the Licensure Exam for Registered Nurses. This introduction discusses the NCLEX® exam in general and how the *Exam Cram* can help you prepare for the test. It doesn't matter whether this is the first time you're going to take the exam or if you have taken it previously; this book gives you the necessary information and techniques to obtain licensure.

*Exam Cram* books help you understand and appreciate the subjects and materials you need to pass. The books are aimed at test preparation and review. They do not teach you everything you need to know about the subject of nursing. Instead they present you with materials you are likely to encounter on the exam. Using a simple approach, we will help you understand the need-to-know information. First, you will learn medical-surgical content, psychiatric content, obstetric content, and pediatric content, with an emphasis on pharmacology, skills, and treatment of these disorders. In a well-organized format, you will learn the pathophysiology of the most common problems affecting clients, the treatment of these disorders, and the nursing care.

The NCLEX-RN® consists of questions from the cognitive levels of knowledge, comprehension, application, and analysis. The majority of questions are written at the application and analysis levels. Questions incorporate the five stages of the nursing process (assessment, diagnosis, planning, implementation, and evaluation) and the four categories of client needs. Client needs are divided into subcategories that define the content within each of the four major categories. These categories and subcategories are

- ▶ Safe, effective care environment:
  - ▶ Management of care: 17–23%
  - ▶ Safety and infection control: 9–15%
- ▶ Health promotion and maintenance: 6%–12%
- ▶ Psychosocial integrity: 6%–12%

- ▶ Physiological integrity:
  - ▶ Basic care and comfort: 6%–12%
  - ▶ Pharmacological and parenteral therapy: 12%–18%
  - ▶ Reduction of risk: 9%–15%
  - ▶ Physiological adaptation: 11%–17%

## Taking the Computerized Adaptive Test

Computerized Adaptive Testing offers the candidate several advantages. The graduate can schedule the exam at a time that is convenient for him. The Pearson VUE Testing group is responsible for administering the exam. Because you might not be familiar with the Pearson testing centers, we recommend that you arrive at least 30 minutes early. If you are late, you will not be allowed to test. Bring two forms of identification with you, one of which must be a picture ID. Be sure that your form of identification matches your application. You will be photographed and fingerprinted on entering the testing site, so don't let this increase your stress. The allotted time is six hours. The candidate can receive results within approximately seven days (in some states even sooner). Remember that the exam is written at approximately the 10th-grade reading level, so keep a good dictionary handy during your studies.

## The Cost of the Exam

The candidate wishing to write the licensure exam must fill out two applications: one to the National Council and one to the state in which she wants to be licensed. A separate fee must accompany each application. The fee required by the National Council is \$200. State licensing fees vary from state to state. Licensure applications can be obtained on the National Council's website at [www.ncsbn.org](http://www.ncsbn.org). Several states are members of the multistate licensure compact. This means that, if you are issued a multistate license, you pay only one fee. This information can be obtained by visiting the National Council's website as well.

## How to Prepare for the Exam

Judicious use of this book, either alone or with other books such as the *NCLEX® Exam Prep* book by the same authors, and a review seminar such as the one provided by Rinehart and Associates, will help you achieve your goal of becoming a registered nurse. As you review for the NCLEX® Exam, we suggest that you find a location where you can concentrate on the material each day. A minimum of two hours per day for at least two weeks is suggested. We

have provided you with exam alerts, tips, notes, and sample questions—both multiple-choice and alternative items. These questions will acquaint you with the types of questions you will see during the exam. We have also formulated a mock exam with those difficult management and delegation questions that you can score to determine your readiness to test. Pay particular attention to the exam alerts and the Cram Sheet. Using them will help you gain and retain knowledge and reduce your stress as you prepare to test.

## How to Use This Book

Each topical *Exam Cram* chapter follows a regular structure, along with cues about important or useful information. Here's the structure of a typical chapter:

- ▶ **Opening hotlists**—Each chapter begins with a list of terms and concepts you must learn and understand before you can know the subject matter. The hotlists are followed by an introductory section that sets the stage for the rest of the chapter.
- ▶ **Topical coverage**—After the opening hotlists, each chapter covers a series of topics related to the chapter's subject title. Throughout this section, we highlight topics or concepts that are likely to appear in the exam.

Even though the book is structured to the exam, these flagged items are often particularly important:

- ▶ **Exam alerts**—An exam alert stresses concepts, terms, or activities that are likely to relate to one or more test questions. For that reason, we think any information in an alert is worthy of unusual attentiveness on your part. A special exam alert layout is used like this:

### EXAM ALERT

This is what an exam alert looks like. Remember to pay particular attention to these items!

- ▶ **Notes**—Throughout each chapter, additional information is provided that, although not directly related to the exam itself, is still useful and will aid your preparation. A sample note is shown here:

### NOTE

This is how notes are formatted. Notes direct your attention to important pieces of information that relate to nursing and nursing certification.

- ▶ **Tips**—A tip might tell you another way of accomplishing something in a more efficient or time-saving manner. An example of a tip is shown here:

**TIP**

This is how tips are formatted. Keep your eyes open for these, and you'll learn some interesting nursing tips!

- ▶ **Exam prep questions**—Although we talk about test questions and topics throughout the book, the section at the end of each chapter presents a series of mock test questions and explanations of both correct and incorrect answers.
- ▶ **Practice exams**—Practice Exam I and Practice Exam II provide additional practice questions. Use these to gauge your learning and to build the confidence needed to move forward to the real exam.
- ▶ **Glossary**—At the end of the book you will find a glossary that defines critical nursing terms we cover in this book.
- ▶ **CD**—The CD includes a testing engine with many practice questions that you should use repeatedly to practice your test-taking skills and to measure your level of learning. You should be able to correctly answer more than 90% of the questions on the practice tests before taking the real exam.
- ▶ **Cram Sheet**—At the very beginning of the book is a tear card we call the Cram Sheet. This is a helpful tool that gives you distilled, compressed facts. It is a great tool for last-minute study and review.

## About the Book

The topics in this book have been structured using the systems approach to nursing. We believe that the simple way to learn the disease process, treatments, and diagnostic studies is the best way. You will review material from each system and the related skills, diagnostics, diets, and so on with each system as we move through the content. You will also consider cultural and religious concerns when caring for the client experiencing threats or deprivations.

Aside from being a test preparation book, this book is also useful if you are brushing up on your nursing knowledge. It is an excellent quick reference for the licensed nurse.

# Contact the Authors

The authors of this text are interested in you and want you to pass on the first attempt. If, after reviewing with this text, you would like to contact the authors, you can do so at Rinehart and Associates, PO Box 124, Booneville, MS 38829 or by visiting our website at [www.nclexreview.net](http://www.nclexreview.net).

# Self-Assessment

Before you take the exam, you might have some concerns, such as

- ▶ Am I required to answer all 265 questions to pass?

No. If you run out of time, the computer looks at the last portion of the exam and determines whether you are consistently above or below the pass point.

- ▶ What score do I have to make to pass the NCLEX-RN® Exam?

There is not a set score. When you were in nursing school, you might have been required to score 75% or 80% to pass and progress onto the next level. The licensure exam is not scored in percentages. The computer is looking for consistency above or below the pass point. When the candidate shows this consistency, the computer stops asking questions.

- ▶ How do they develop the test plan?

Every three years a survey is sent out to 4,000 newly licensed nurses. These nurses are asked questions based on the “Activity Statement” for nursing practice. Based on the results of the survey, the test plan is set by the National Council and members of the Licensure Committee. These members are appointed from representative states.

- ▶ What types of questions will I be asked?

The majority of questions are multiple-choice. A small number of the questions may be *alternative items*. These items are identify picture, put on ear phones and identify sound such as breath sounds, identify grafts, fill-in-the-blanks, identify-a-diagram, place-in-sequence, or check-all-that-apply questions. Some examples of alternative items are:

- ▶ Figure the 8-hour intake and output.
- ▶ Identify the area where the mitral valve is heard the loudest.
- ▶ Place in sequence the tasks you would use in the skill of washing your hands.
- ▶ Work the math problem.
- ▶ Check all that apply to the care of the client after a cardiac catheterization.



- ▶ Will I have a calculator for math problems?

Yes, a drop-down calculator is provided.

- ▶ Will I have something to write on in the testing area?

Yes, a dry erase board or paper will be provided. Don't worry about the test givers thinking that you are cheating. They clean and secure the area after each candidate.

- ▶ What if I get sick and cannot take my exam?

You have a period of time allowed during which you can cancel your appointment and reschedule. If, however, you do not contact the Pearson VUE group in that allotted time and do not attend to take the exam, you forfeit your money and have to reapply.

- ▶ Can I carry a purse or bag into the testing center?

No, there will be lockers for your use in the testing center. (Also, dress warmly because the area is usually cool.) Any suspicious behavior can cause you to forfeit the opportunity to complete your test so be sure to leave any paper or notes in your car.

- ▶ Can I take breaks?

Yes, there are optional breaks throughout the test.

- ▶ If I should fail, when could I retest?

The required time to wait before you can rewrite is 45 days in most states; however, some states require that you wait 90 days. Should you be unsuccessful, you should contact the state where you want to obtain licensure for its required retest time.

## Testing Your Exam Readiness

First and foremost, you obviously must have completed or be very close to completing your RN classes at the college level. The better you did in your college work, the better your chances are of doing well on this exam. However, there are no guarantees on the NCLEX-RN® exam, so you should prepare specifically for this exam using your college class work as a foundation.

Whether you attend a formal review seminar or use written material such as this book, or a combination of both, preparation is essential. Costing as much as \$400 a try—pass or fail—you want to do everything you can to pass on your first attempt. Spend time each day studying and taking exam questions. The more questions you take, the more prepared you will be. I recommend that you score at least 90% on our practice questions consistently before you attempt to take the exam. With these facts in mind, let's get ready to take the NCLEX-RN® exam. Good luck!

# 3

CHAPTER THREE

## Caring for the Client with Disorders of the Respiratory System

---

### Terms you'll need to understand

- ✓ Acute respiratory failure
- ✓ Apnea
- ✓ Asthma
- ✓ Atelectasis
- ✓ Bronchitis
- ✓ Continuous positive airway pressure (CPAP)
- ✓ Cor pulmonale
- ✓ Cyanosis
- ✓ Dyspnea
- ✓ Emphysema
- ✓ Empyema
- ✓ Hemoptysis
- ✓ Hypoxemia
- ✓ Hypoxia
- ✓ Pleural effusion
- ✓ Pleurisy
- ✓ Pneumonia
- ✓ Pulmonary embolus
- ✓ Tachypnea

---

### Nursing skills you'll need to master

- ✓ Assessing breath sounds
- ✓ Providing tracheostomy care
- ✓ Collecting sputum
- ✓ Teaching proper use of an inhaler (MDI and DPI)
- ✓ Performing chest physiotherapy
- ✓ Assisting with thoracentesis
- ✓ Obtaining a throat culture
- ✓ Performing venipuncture
- ✓ Administering medication
- ✓ Managing chest drainage system
- ✓ Maintaining oxygen therapy
- ✓ Maintaining assisted ventilation

# Chronic Obstructive Pulmonary Disease

*Chronic obstructive pulmonary disease (COPD)* exists when prolonged disease or injury has made the lungs less capable of meeting the body's oxygen needs. Examples of COPD include chronic bronchitis, emphysema, and asthma.

## Chronic Bronchitis

*Chronic bronchitis*, an inflammation of the bronchi and bronchioles, is caused by continuous exposure to infection and non-infectious irritants, such as cigarette smoke. The condition is most common in those ages 40 to 55. Chronic bronchitis may be reversed with the removal of noxious irritants, although it is often complicated by chronic lung infections. These infections, which are characterized by a productive cough and dyspnea, can progress to right-sided heart failure and pulmonary hypertension. Chronic bronchitis and emphysema have similar symptoms that require similar interventions.

## Emphysema

*Emphysema* is the irreversible overdistention of the airspaces of the lungs, which results in destruction of the alveolar walls. Clients with emphysema are classified as *pink puffers* or *blue bloaters*. Pink puffers may complain of exertional dyspnea without cyanosis. Blue bloaters develop chronic hypoxia, cyanosis, polycythemia, cor pulmonale, pulmonary edema, and eventually respiratory failure.

Physical assessment reveals the presence of a barrel chest, use of accessory muscles, coughing with the production of thick mucoid sputum, prolonged expiratory phase with grunting respirations, peripheral cyanosis, and digital clubbing.

In identifying emphysema, a chest x-ray reveals hyperinflation of the lungs with flattened diaphragm. Pulmonary studies show that the residual volume is increased while vital capacity is decreased. Arterial blood gases reveal hypoxemia.

Many symptoms of chronic bronchitis and emphysema are the same; therefore, medications for the client with chronic bronchitis and emphysema include bronchodilators, steroids, antibiotics, and expectorants. Oxygen should be administered via nasal cannula at 2–3 liters/minute. Close attention should be given to correcting acid-base imbalances, meeting the client's nutritional needs, avoidance of respiratory irritants, prevention of respiratory infections, providing oral hygiene, and client teaching regarding medications.

**CAUTION**

When administering antibiotics, a separate IV line should be established for the administration of aminophylline—a bronchodilator—because incompatibilities can exist with some antibiotics and the administration of a bronchodilator. If only one access is established, the SAS (saline, administer drug, saline) procedure should be used.

The client receiving aminophylline should be placed on cardiorespiratory monitoring because aminophylline affects heart rate, respiratory rate, and blood pressure. In this scenario, toxicity can occur rapidly. Toxic symptoms include nausea, vomiting, tachycardia, palpitations, hypotension, shock, coma, and death.

The therapeutic range for aminophylline is as follows: 10–20 mcg/mL.

## Asthma

*Asthma* is the most common respiratory condition of childhood. *Intrinsic (nonallergenic) asthma* is precipitated by exposure to cold temperatures or infection. *Extrinsic (allergenic or atopic) asthma* is often associated with childhood eczema. Both asthma and eczema are triggered by allergies to certain foods or food additives. Introducing new foods to the infant one at a time helps decrease the development of these allergic responses. Easily digested, hypoallergenic foods and juices should be introduced first, including rice cereal and apple juice, which may be given at six months of age. Cow's milk should not be given to the infant before one year of age. Symptoms of asthma include expiratory wheeze; shortness of breath; and a dry, hacking cough, which eventually produces thick, white, tenacious sputum. In some instances an attack may progress to status asthmaticus, leading to respiratory collapse and death.

Management of the client with asthma includes maintenance therapy with mast cell stabilizers and leukotriene modifiers. Treatment of acute asthmatic attacks includes the administration of oral or inhaled short-term or long-term B<sub>2</sub> agonist and anti-inflammatories as well as supplemental oxygen. Methylxanthines, such as aminophylline, are rarely used for the treatment of asthma. These drugs, which can cause tachycardia and dysrhythmias, are administered as a last resort. Antibiotics are frequently ordered when a respiratory infection is present.

## Acute Respiratory Infections

Acute respiratory infections, such as pneumonia, are among the most common causes of death from infectious diseases in the United States. Pneumonia is a major cause of death in persons over age 65.

# Pneumonia

Pneumonia is an inflammation of the parenchyma of the lungs. Causative organisms include bacteria, viruses, and fungi. Some of these organisms are listed here:

- ▶ *Pneumococcus*
- ▶ Group A beta hemolytic streptococcus
- ▶ *Staphylococcus*
- ▶ *Pseudomonas*
- ▶ Influenza types A and B
- ▶ Cytomegalovirus
- ▶ *Aspergillus fungiatus*
- ▶ *Pneumocystis carinii*

Presenting symptoms depend on the causative organism. The client with viral pneumonia tends to have milder symptoms, whereas the client with bacterial pneumonia might have chills and fever as high as 103°. Clients with cytomegalovirus, *pneumocystis carinii*, or *aspergillus* will be acutely ill. General symptoms of pneumonia include

- ▶ Hypoxia
- ▶ Tachypnea
- ▶ Tachycardia
- ▶ Chest pain
- ▶ Malaise
- ▶ Fever
- ▶ Confusion (especially in the elderly client)

Care of the client with pneumonia depends on the causative organism. The management of bacterial pneumonias includes antibiotics, antitussives, antipyretics, and oxygen. Antibiotics that may be ordered include penicillin G, tetracycline, *garamycin*, and erythromycin. Viral pneumonias do not respond to antimicrobial therapy, but are treated with antiviral medication such as *Symmetrel* (amantadine). Fungal pneumonias are treated with antifungal medication such as *Nizoral* (ketoconazole). Additional therapies for the client with pneumonia include providing for fluid and nutritional needs, obtaining frequent vital signs, and providing oral hygiene. Supplemental oxygen and chest percussion and drainage should be performed as ordered by the physician

**CAUTION**

Some medications used in the treatment of pneumonia require special attention:

- ▶ **Tetracycline**—Should not be given to women who are pregnant or to small children because of the damage it can cause to developing teeth and bones.
- ▶ **Garamycin**—An aminoglycoside, it is both ototoxic and nephrotoxic. It is important to monitor the client for signs of toxicity. Serum peak and trough levels are obtained according to hospital protocol.

Peak levels for aminoglycosides are drawn 30 minutes after the third or fourth IV infusion. Trough levels for aminoglycosides are drawn 30 minutes before the third or fourth IV infusion. The therapeutic range for garamycin is 4–10 mcg/mL.

## Pleurisy

*Pleurisy*, an inflammation of the pleural sac, can be associated with upper respiratory infection, pulmonary embolus, thoracotomy, chest trauma, or cancer. Symptoms include

- ▶ Sharp pain on inspiration
- ▶ Chills
- ▶ Fever
- ▶ Cough
- ▶ Dyspnea

Chest x-ray reveals the presence of air or fluid in the pleural sac. Management of the client with pleurisy includes the administration of analgesics, antitussives, antibiotics, and oxygen therapy. The presence of pleural effusion can require the client to have a thoracentesis. It is the nurse's responsibility to position the client for the procedure and to monitor for signs of complications related to the procedure. The nurse should assess the client's vital signs, particularly changes in respirations and blood pressure, which can reflect impending shock from fluid loss or bleeding. The nurse should also observe the client for signs of a pneumothorax.

Nursing Skill: Positioning the client for a thoracentesis

- ▶ Sitting on the edge of the bed with feet supported and with the head and arms resting on a padded over bed table )
- ▶ Sitting astride a chair with the arms and head resting on the back of the chair
- ▶ Lying on the unaffected side with the head of the bed elevated 30 to 45 degrees (for clients unable to sit upright)

## Tuberculosis

*Tuberculosis (TB)* is a highly contagious respiratory infection caused by the mycobacterium tuberculosis. It is transmitted by droplets from the respiratory tract. Airborne precautions, as outlined by the Centers for Disease Control (CDC), should be used when caring for the client with tuberculosis.

### NOTE

Standard precautions and transmission-based precautions are provided in Appendix A, “Things You Forgot,” which is on the CD.

Diagnosis includes the administration of the Mantoux skin test, sometimes referred to as the Purified Protein Derivative (PPD), which is read in 48–72 hours. The presence of a positive Mantoux test indicates exposure to TB but not active infection. A chest x-ray should be ordered for those with a prior positive skin test. A definite diagnosis of TB is made if the sputum specimen is positive for the tubercle bacillus. Factors that can cause a false positive TB skin test include nontuberculous mycobacterium and inoculation with BCG vaccine. Factors that can cause a false negative TB skin test include anergy (a weakened immune system), recent TB infection, age, vaccination with live viruses, overwhelming TB, and poor testing technique. Management of the client with TB includes the use of ultraviolet light therapy and the administration of antimycobacterial drugs. Medication regimens can consist of several drugs including Myambutol (ethambutol), INH (isoniazid), Rifadin (rifampin), and PZA (pyrazinamide). The use of multiple drug therapy has reduced treatment time from two years to as little as six months; however, drug resistant forms may require longer treatment periods. Clients are no longer considered infectious after three negative sputum samples have been obtained. Surgical management may include a wedge resection or lobectomy.

## Influenza

*Influenza* is an acute highly contagious infection that primarily affects the upper respiratory tract. Symptoms of influenza include the following:

- ▶ Chills and fever greater than 102° F.
- ▶ Sore throat and laryngitis
- ▶ Runny nose
- ▶ Muscle aches and headache

Complications of influenza include pneumonia, exacerbations of Chronic Obstructive Pulmonary Disease (COPD), and myositis. More serious complications include pericarditis

and encephalitis. Children, the elderly, and those with chronic illness are more likely to develop severe complications; therefore, it is recommended that these clients receive annual immunization. The vaccine is given in the fall, prior to the onset of annual outbreaks, which occur in the winter months. The vaccine is produced in eggs; therefore, it should not be given to anyone who is allergic to egg protein. Children age two and older can receive the nasal vaccine as well as adults.

Treatment of influenza is aimed at controlling symptoms and preventing complications. Interventions for the client with influenza include bed rest, increased fluid intake, decongestant nasal sprays, antitussives with codeine, and antipyretics. Antibiotics are indicated if the client develops bacterial pneumonia. Antiviral medication such as Relenza (zanamivir) and Tamiflu (oseltamivir) are used for the prevention as well as the treatment of influenza A and B and can be used to reduce the duration and severity of symptoms. Symmetrel (amantadine) or Flumadine (rimantadine) are also used to prevent or decrease symptoms of the flu.

## Acute Respiratory Failure

*Acute respiratory failure* can be defined as the lungs' failure to meet the body's oxygen requirements. One acute respiratory condition you need to be familiar with is acute respiratory distress syndrome, commonly known as ARDS.

## Acute Respiratory Distress Syndrome

Acute respiratory distress syndrome, commonly known as *ARDS* or *noncardiogenic pulmonary edema*, occurs mostly in otherwise healthy persons. ARDS can be the result of anaphylaxis, aspiration, pulmonary emboli, inhalation burn injury, or complications from abdominal or thoracic surgery. ARDS may be diagnosed by a chest x-ray that will reveal emphysematous changes and infiltrates that give the lungs a characteristic appearance described as ground glass. Assessment of the client with ARDS reveals

- ▶ Hypoxia
- ▶ Sternal and costal retractions
- ▶ Presence of rales or rhonchi
- ▶ Diminished breath sounds
- ▶ Refractory hypoxemia

Care of the client with ARDS involves

- ▶ Use of assisted ventilation
- ▶ Monitoring of arterial blood gases



- ▶ Attention to nutritional needs
- ▶ Frequent change in position, placement in high Fowler's position, prone position, or use of specialized beds to minimize consolidation of infiltrates in large airways
- ▶ Investigational therapies, including the use of vitamins C and E, aspirin, interleukin, and surfactant replacements

## Pulmonary Embolus

*Pulmonary embolus* refers to the obstruction of the pulmonary artery or one of its branches by a clot or some other undissolved matter, such as fat or a gaseous substance. Clots can originate anywhere in the body but are most likely to migrate from a vein deep in the legs, pelvis, kidney, or arms. *Fat emboli* are associated with fractures of the long bones, particularly the femur. *Air emboli*, which are less common, can occur during the insertion or removal of a central line. Common risk factors for the development of pulmonary embolus include immobilization, fractures, trauma, cigarette smoking, use of oral contraceptives, and history of clot formation.

### TIP

Remember the three Fs associated with fat emboli:

- ▶ Fat
- ▶ Femur
- ▶ Football player

Fat emboli are associated with fractures of long bones (such as a fractured femur); most fractured femurs occur in young men 18–25, the age of most football players.

Symptoms of a pulmonary embolus depend on the size and location of the clot or undissolved matter. Symptoms include

- ▶ Chest pain
- ▶ Dyspnea
- ▶ Syncope
- ▶ Hemoptysis
- ▶ Tachycardia
- ▶ Hypotension
- ▶ Sense of apprehension

- ▶ Petechiae over the chest and axilla
- ▶ Distended neck veins

Diagnostic tests to confirm the presence of pulmonary embolus include chest x-ray, pulmonary angiography, lung scan, and ECG to rule out myocardial infarction. Management of the client with a pulmonary embolus includes

- ▶ Placing the client in high Fowler's position
- ▶ Administering oxygen via mask
- ▶ Giving medication for chest pain
- ▶ Using thrombolytics/anticoagulants

Antibiotics are indicated for those with septic emboli. Surgical management using umbrella-type filters is indicated for those who cannot take anticoagulants as well as for the client who has recurrent emboli while taking anticoagulants. Clients receiving anticoagulant therapy should be observed for signs of bleeding. PT, INR, and PTT are three tests used to track the client's clotting time. You can refer to Chapter 13, "Caring for the Client with Disorders of the Cardiovascular System," for a more complete discussion of these tests.

### CAUTION

Streptokinase is made from beta strep; therefore, clients with a history of strep infections may respond poorly to anticoagulant therapy with streptokinase because they might have formed antibodies.

Streptokinase is not clot specific; therefore, the client may develop a tendency to bleed from incision or injection sites.

## Emerging Infections

The CDC (1994) defines *emerging infections* as diseases of infectious origin with human incidences occurring within the past two decades. Emerging illnesses are likely to increase in incidence in the near future. Two respiratory conditions listed as emerging infections are Severe Acute Respiratory Syndrome (SARS) and Legionnaire's disease.

### Severe Acute Respiratory Syndrome

*Severe Acute Respiratory Syndrome (SARS)* is caused by a coronavirus. Symptoms include

- ▶ Fever
- ▶ Dry cough

- ▶ Hypoxemia
- ▶ Pneumonia

In identifying SARS, a chest x-ray reveals “ground glass” infiltrates with bilateral consolidation occurring sometimes within 24–48 hours, thus suggesting the rapid development of acute respiratory failure. SARS was first reported in Asia in February 2003. The disease spread to more than two dozen countries in Europe, Asia, North America, and South America before being contained in that same year. A history of recent travel is significant in the client’s history.

The SARS virus can be found in nasopharyngeal and oropharyngeal secretions, blood, and stool. Diagnostic tests for SARS include

- ▶ Sputum cultures for Influenza A, B, and RSV
- ▶ Serum tests to detect antibodies IgM and IgG
- ▶ Reverse transcriptase polymerase chain reaction tests performed to detect RNA of SARS CoV

Two tests on two different specimens must be positive to confirm the diagnosis. Test results are considered negative if no SARS CoV antibodies are found 28 days after the onset of symptoms.

The client suspected of having SARS should be cared for using airborne and contact precautions. Management includes the use of antibiotics to treat secondary or atypical pneumonia. Antivirals or retrovirals can be used to inhibit replication. Respiratory support, closed system for suctioning, and the use of surfactant replacement may be ordered.

## Legionnaire’s Disease

*Legionnaire’s disease* is caused by gram negative bacteria found in both natural and manmade water sources. Bacterial growth is greater in stored water maintained at temperatures ranging from 77° to 107° F. Risk factors include

- ▶ Immunosuppression
- ▶ Diabetes
- ▶ Pulmonary disease

Legionnaire’s involves the lungs and other organs. The symptoms include

- ▶ Productive cough
- ▶ Dyspnea

- ▶ Chest pain
- ▶ Diarrhea
- ▶ Fever

Diagnostic tests include a urinary antigen test that remains positive after initial antibiotic therapy. Management includes the use of antibiotics, oxygen, provision of nutrition, and hydration. The drug of choice for treating Legionnaire's disease is Zithromax (azithromycin). Transmission-based precautions are not necessary when caring for the client with Legionnaire's disease because there is no indication of human-to-human transmission.

## Diagnostic Tests for Review

These are simply some of the tests that are useful in diagnosing pulmonary disorders. You should review the normal lab values as well as any special preparations for the client undergoing those tests. In addition, think about the care given to clients after the procedures have been completed. For instance, the client who has undergone a bronchoscopy will have a depressed gag reflex, which increases the chance of aspiration. No food or fluid should be given until the gag reflex returns. The tests for diagnosing pulmonary disorders are as follows:

- ▶ CBC
- ▶ Chest x-ray
- ▶ Pulmonary function tests
- ▶ Lung scan
- ▶ Bronchoscopy

## Pharmacology Categories for Review

The client with a respiratory disorder should be managed with several categories of medications. The client with an acute respiratory condition, such as bacterial pneumonia, is given an antibiotic to fight the infection, antipyretic medication for fever and body aches, and an antitussive for relief of cough. The client with a chronic respiratory condition may receive many of the same medications, with the addition of a steroid or bronchodilator. The following list contains the most commonly prescribed categories of medications used to treat clients with respiratory conditions:

- ▶ Antibiotics
- ▶ Antivirals

- ▶ Antituberculars
- ▶ Antitussives
- ▶ Antipyretics
- ▶ Bronchodilators
- ▶ Expectorants
- ▶ Leukotriene modifiers
- ▶ Mast-cell stabilizers
- ▶ Steroids

# Exam Prep Questions

1. When performing an assessment on the client with emphysema, the nurse finds that the client has a barrel chest. The alteration in the client's chest is due to:
  - A. Collapse of distal alveoli
  - B. Hyperinflation of the lungs
  - C. Long-term chronic hypoxia
  - D. Use of accessory muscles
2. The nurse notes that a client with COPD demonstrates more dyspnea in certain positions. Which position is most likely to alleviate the client's dyspnea?
  - A. Lying supine with a single pillow
  - B. Standing or sitting upright
  - C. Side lying with the head elevated
  - D. Lying with head slightly lowered
3. When reviewing the chart of a client with long standing lung disease, the nurse should pay close attention to the results of which pulmonary function test?
  - A. Residual volume
  - B. Total lung capacity
  - C. FEV1/FVC ratio
  - D. Functional residual capacity
4. The physician has ordered O<sub>2</sub> at 3 liters/minute via nasal cannula. O<sub>2</sub> amounts greater than 3 liters / minute are contraindicated in the client with COPD because:
  - A. Higher concentrations result in severe headache.
  - B. Hypercapnic drive is necessary for breathing.
  - C. Higher levels will be required later to raise the pO<sub>2</sub>.
  - D. Hypoxic drive is needed for breathing.

5. The client taking a bronchodilator tells the nurse that he is going to begin a smoking cessation program when he is discharged. The nurse should tell the client to notify the doctor if his smoking pattern changes because he will:
- A. Need his medication dosage adjusted
  - B. Require an increase in antitussive medication
  - C. No longer need annual influenza immunization
  - D. Not derive as much benefit from inhaler use
6. Lab results indicate that the client's serum aminophylline level is 17mcg/mL. The nurse recognizes that the aminophylline level is:
- A. Within therapeutic range
  - B. Too high and should be reported
  - C. Questionable and should be repeated
  - D. Too low to be therapeutic
7. The morning weight for a client with emphysema indicates that the client has gained 5 pounds in less than a week, even though his oral intake has been modest. The client's weight gain may reflect which associated complication of COPD?
- A. Polycythemia
  - B. Cor pulmonale
  - C. Left ventricular failure
  - D. Compensated acidosis
8. The nurse is teaching the client the appropriate way to use a metered dose inhaler. Which action indicates the client needs additional teaching?
- A. The client takes a deep breath while depressing the inhaler.
  - B. The client places the inhaler two fingers from the mouth.
  - C. The client waits 15 seconds before using the inhaler a second time.
  - D. The client exhales slowly using purse lipped breathing.

9. The client with COPD may lose weight despite having adequate caloric intake. When counseling the client in ways to maintain an optimal weight, the nurse should tell the client to:
- A. Continue the same caloric intake and increase the amount of fat intake
  - B. Increase his activity level to stimulate his appetite
  - C. Increase the amount of complex carbohydrates and decrease the amount of fat intake
  - D. Decrease the amount of complex carbohydrates while increasing calories, protein, vitamins, and minerals
10. The client has been receiving garamycin 65 mg IVPB every 8 hours for the past 6 days. Which lab result indicates an adverse reaction to the medication?
- A. WBC 7500
  - B. Serum glucose 92
  - C. Protein 3.5
  - D. Serum creatinine 2.0

## Answer Rationales

1. Answer B is correct. Clients with emphysema develop a barrel chest due to the trapping of air in the lungs, causing them to hyperinflate. Answers C and D are common in those with emphysema but do not cause the chest to become barrel shaped. Answer A does not occur in emphysema.
2. Answer B is correct. The client with chronic obstructive pulmonary disease has increased difficulty breathing when lying down. His respiratory effort is improved by standing or sitting upright or by having the bed in high Fowler's position. Answers A, C, and D do not alleviate the client's dyspnea; therefore they are incorrect.
3. Answer C is correct. The FEV1/FVC ratio indicates disease progression. As COPD worsens, the ratio of FEV1 to FVC becomes smaller. Answers A and B reflect loss of elastic recoil due to narrowing and obstruction of the airway. Answer D is increased in clients with obstructive bronchitis.
4. Answer D is correct. In clients with COPD, respiratory effort is stimulated by hypoxemia. Answers A and C are incorrect because higher levels would rob the client of the drive to breathe. Answer B is an incorrect statement.
5. Answer A is correct. Changes in smoking patterns should be discussed with the physician because they have an impact on the amount of medication needed. Answer B is incorrect because clients with COPD are placed on expectorants, not antitussives. Answer C is incorrect because an annual influenza vaccine is recommended for all those with lung disease. Answer D is incorrect because benefits from inhaler use should be increased when the client stops smoking.



6. Answer A is correct. The therapeutic range for aminophylline is 10–20 mcg/ml. Answers B and D are incorrect. There are no indications that the results are questionable; therefore, repeating the test as offered by answer C is incorrect.
7. Answer B is correct. Cor pulmonale, or right sided heart failure, is a possible complication of emphysema. Answers A and D do not cause weight gain, so they're incorrect. Answer C would be reflected in pulmonary edema, so it's incorrect.
8. Answer C is correct. The client should wait 60 seconds before using the inhaler a second time. The client's wait time of 15 seconds indicates that the client needs further teaching. Answers A, B, and D indicate that the client understands the correct use of the inhaler.
9. Answer D. The client with COPD needs additional calories, protein, vitamins, and minerals. Answer A is incorrect because the client needs more calories but not more fat. Answer B is not feasible, will increase the O<sub>2</sub> demands, and will result in further weight loss. Answer C leads to excess acid production and an increased respiratory workload.
10. Answer D is correct. The serum creatinine is elevated, indicating renal impairment. Answers A, B, and C are within normal limits.

## Suggested Reading and Resources

- ▶ Centers for Disease Control and Prevention: [www.cdc.gov](http://www.cdc.gov).
- ▶ American Lung Association: [www.lungusa.org](http://www.lungusa.org).
- ▶ The Pathology Guy: [www.pathguy.com](http://www.pathguy.com).
- ▶ Health24: [www.health24.com](http://www.health24.com).
- ▶ Ignatavicius, D., and Workman, S. *Medical Surgical Nursing: Patient Centered Collaborative Care*. 7<sup>th</sup> ed.
- ▶ Brunner, L., and Suddarth, D. *Textbook of Medical Surgical Nursing*. 12<sup>th</sup> ed. Philadelphia: Lippincott Williams & Wilkins, 2009.
- ▶ LeMone, P., and Burke, K. in *Medical Surgical Nursing: Critical Thinking in Client Care*. 5<sup>th</sup> ed. Upper Saddle River, NJ: Pearson Prentice Hall, 2011.
- ▶ Lewis, S., Heitkemper, M., Dirksen, S., O'Brien, P., and Bucher, L. *Medical Surgical Nursing: Assessment and Management of Clinical Problems*. 8<sup>th</sup> ed. Philadelphia: Elsevier, 2011.
- ▶ Lehne, R. *Pharmacology for Nursing Care*. 8<sup>th</sup> ed., Philadelphia: Elsevier, 2011.

*This page intentionally left blank*

# Index

## A

---

### **ABCD assessment, emergency nursing, 366**

- airway, 367
- breathing, 367-368
- circulation, 368-369
- deficits, 369

### **abdominal injuries, 371-372**

### **abducens nerve, 258**

### **abortions, 304-305**

### **abruptio placenta, 307**

### **absence seizures, 252**

### **abstinence (contraception), 319**

### **ACE (angiotensin-converting enzyme) inhibitors, 22-23**

### **acetaminophen overdose, 357**

### **acid/base balance, 90**

- influence of aging, 98-99
- metabolic acidosis, 91-93
- metabolic alkalosis, 95-96
- normal electrolyte values, 97-98
- nursing skills, 89
- pH regulation, 91
- practice exam questions, 100-102
- resources, 103, 599
- respiratory acidosis, 93-94
- respiratory alkalosis, 96-97
- terminology, 89

### **acidosis**

- metabolic, 91-93
- respiratory, 93-94

### **acids, 90**

### **acquired heart disorders, 340**

acquired immuno-deficiency syndrome (AIDS)

**acquired immuno-deficiency syndrome (AIDS), 310**

**acrocyanosis, 317**

**acromegaly, 211**

**ACTH (adrenocorticoid stimulating hormone), 218**

**active transport, 90**

**acute disorders**

- AOM (acute otitis media), 345
- ARDS (acute respiratory distress syndrome), 51-52
- ARS (acute radiation syndrome), 378
- diarrheal disease, 350
- epiglottitis, 347-348
- glaucoma, 124
- glomerulonephritis, 62-63
- PTSD (post-traumatic stress disorder), 275
- respiratory system, 47
  - influenza, 50-51
  - pleurisy, 49
  - pneumonia, 48-49
  - TB (tuberculosis), 50
- subdural hematomas, 254

**acute respiratory failure, 51**

- ARDS (acute respiratory distress syndrome), 51-52
- pulmonary embolus, 52-53

**acyanotic congenital heart disease, 341**

**Adams position, 355**

**Addiction Research Foundation Chemical Institute  
Withdrawal Assessment-Alcohol, 287**

**Addison's disease, 218-219**

**adenoidectomy, 346**

**ADH (antidiuretic hormone), 211**

**ADHD (attention deficit hyperactive disorder), 291**

**adjustable canes, 202**

**administration of medications, 21**

- antibiotics, 47
- nursing responsibilities, 413
- seven rights, 21

**adolescents**

- emotional/behavioral disorders
  - ADHD, 291
  - autistic disorder, 292
  - conduct disorder, 291
  - eating disorders, 293
  - oppositional defiant disorder, 291
- growth and development, 333

**adrenal gland disorders, 218-219**

**adrenocortical hypersecretion, 219**

**adrenocortical insufficiency, 218-219**

**adrenocorticoid stimulating hormone (ACTH), 218**

**adrenocorticotrophic hormone, 210**

**adult immunization schedule, 594**

**adverse effects**

- angiotensin receptor blockers, 34
- angiotensin-converting enzyme inhibitors, 23
- anti-infectives, 25
- anticoagulants, 37
- anticonvulsants, 27
- antiemetics, 28
- antivirals, 31
- beta adrenergic blockers, 24
- chemotherapy, 145-146
- cholesterol-lowering agents, 32
- glucocorticoids, 30
- histamine 2 antagonists, 35
- magnesium sulfate, 306
- proton pump inhibitors, 36

**advocacy, nursing responsibilities, 414**

**affect, 282**

**aging, influence on fluid and electrolyte balance,  
98-99**

**agoraphobia, 277**

**AHA (American Heart Association), 592**

**AIDS (acquired immuno-deficiency syndrome), 310**

**air emboli, 52**

**airborne precautions, 50, 591**

- airway assessment, 367
- Alaskan Natives, cultural influences, 390-391
- alcoholism, 286-287
- alertness (deficit assessment), 369
- alkalosis  
     metabolic, 95-96  
     respiratory, 96-97
- alkylating agents (chemotherapy), 145
- allergic asthma, 47
- allogenic transplant (bone marrow), 148
- allografts, 115
- alpha-fetoprotein screening, 301-302
- Alzheimer's disease, 266-267
- ambivalence, 282
- ambulation of client, 412
- American Association of Poison Control Centers, 373
- American Cancer Society  
     cancer prevention recommendations, 143  
     cancer warning signs, 140
- American Heart Association (AHA), 592
- aminoglycosides, 25-26
- aminophylline administration, 47
- amniocentesis, 302
- amniotic fluid volume, 590
- amniotic membrane, 115
- amputations, 199-200
- amulets, 390
- analgesics, 20
- anastomosis, 336
- anemia  
     aplastic, 79  
     Cooley's, 81  
     iron deficiency, 80-81  
     pernicious, 78-79  
     sickle cell, 80
- aneurysms, 241
- angiotensin receptor blockers, 33-34
- angiotensin-converting enzyme (ACE) inhibitors, 22-23
- anions, 90
- anorexia nervosa, 293
- Ansler grid, 129
- Antabuse (disulfiram), 287
- antacids, 19
- anthrax, 376
- anti-infectives, 19, 25-26
- antianemics, 20
- antianxiety medications, 26-27
- antibiotics, administration, 47
- anticholinergics, 20
- anticoagulants, 19, 37-38, 590
- anticonvulsants, 20, 26-27
- antidiarrheals, 19
- antidiuretic hormone (ADH), 211
- antidotes  
     Flumazenil, 94  
     Narcan, 94  
     protamine sulfate, 37  
     sodium warfarin, 590
- antiemetics, 28-29
- antihistamines, 19
- antihypertensives, 19
- antipsychotic medications, 28-29, 284
- antipyretics, 19
- antisocial personality disorder, 280
- antistreptolysin (ASO) titer, 62
- antistreptolysin-O (ASLO) titer, 352
- antituberculars, 129
- antitumor antibiotics (chemotherapy), 145
- antivenin, 374
- antivirals, 31-32
- anxiety-related disorders, 274  
     DID (dissociative identity disorder), 275  
     GAD (generalized anxiety disorder), 274

## anxiety-related disorders

- OCD (obsessive-compulsive disorder), 277-278
- panic disorder, 276
- phobic disorders, 277
- PTSD (post-traumatic stress disorder), 275
- somatoform disorder, 276

**AOM (acute otitis media), 345****APGAR scoring, 317-318****aplastic anemia, 79****apothecary system of measurement, 605****Arab-Americans, cultural influences, 393-394****ARDS (acute respiratory distress syndrome), 51-52****ARS (acute radiation syndrome), 378****artificial skin, burn care, 115****Asian-Americans, cultural influences, 391-393****ASLO (antistreptolysin-O) titer, 352****ASO (antistreptolysin) titer, 62****Asperger's syndrome, 292****aspirin overdose, 357****assault, 411****assessment**

- ABCD assessment, 366
  - airway, 367
  - breathing, 367-368
  - circulation, 368-369
  - deficits, 369
- abdominal injuries, 371
- ARDS (acute respiratory distress syndrome), 51
  - cultural influences, 386-387
- emphysema, 46
- fetal heart tones, 303
- neurological system, 258
  - cranial nerves, 258-259
  - Glasgow coma scale, 259-260
  - increased intracranial pressure, 260
- skin lesions, 142

**assistive devices, musculoskeletal issues, 201**

- canes, 202
- crutches, 201
- walkers, 202-203

**association, 282****asthma, 47****astigmatism, 127****atopic asthma, 47****atrial septal defect, 341****atropic macular degeneration, 126****attention deficit hyperactive disorder (ADHD), 291****aura, 251****autistic disorder, 282, 292****autologous transplant (bone marrow), 148****automaticisms, 252****autonomic hyperreflexia, 264****avoidant personality disorder, 281**

---

**B**

---

**background diabetic retinopathy, 125****balanced suspension traction, 189****Ballance's sign, 372****ballottement, 300****barbiturate withdrawal, 289****barium enema, 165****Barrett's esophagus, 167****barrier methods (contraception), 320****bases, 90****basilar skull fractures, 253****bathing clients, 412****battery, 411****Battle's sign, 254****behavioral disorders, 291**

- ADHD, 291
- autistic disorder, 292
- conduct disorder, 291

- eating disorders, 293
- oppositional defiant disorder, 291
- beneficial beliefs, 386**
- benign prostatic hyperplasia (BPH), 68-69**
- benzodiazepines, 26-27**
- beta adrenergic blockers, 23-24**
- biliary atresia, 337**
- bilirubin, 318**
- Bill of Rights, 408**
- biologic dressings (burn care), 115**
- biological agents (bioterrorism), 375-377**
- biological response modifiers (chemotherapy), 145**
- biosynthetic dressings (burn care), 115**
- bioterrorism, 375**
  - chemical/biological agents, 375-377
  - nuclear warfare, 378
  - triage categories for victims, 379
- bipolar disorders, 284**
  - acute mania, 284-285
  - major depression, 285-286
- birth canal (passageway), 311**
- bites, 374-375**
- bivalve treatment, 192**
- bladder cancer, 69-70, 141**
- Blalock-Taussig procedure, 343**
- blood pressure, 589**
- blood urea nitrogen (BUN), 62**
- blue bloaters, 46**
- blue spells, 342**
- blunt injuries, 371**
- boards of nursing, 406**
- body fluids, 591**
- bone marrow transplantation, 147-149**
- borderline personality disorder, 280**
- botulism, 179, 377**
- BPH (benign prostatic hyperplasia), 68-69**
- bradycardia, 314**
- brain injuries, 253-254**
- BRAT diet, 350**
- breast cancer, 141**
- breathing assessment, 367-368**
- Brethine (terbutaline sulfate), 310**
- bromocriptine mesylate (Parlodel), 213**
- bronchiolitis, 348-349**
- bronchitis, 46**
- bronchodilators, 19**
- Buddhism, 392, 396**
- Buerger's disease, 240**
- buffer systems, 91**
- bulimia nervosa, 293**
- BUN (blood urea nitrogen), 62**
- burn care**
  - classifications, 106-108
  - diagnostic tests, 116
  - incidence of injury, 106
  - medications, 116
  - nursing care, 109
    - dressings, 114-115
      - emergent phase, 110-111
      - intermediate phase, 113-114
      - rehabilitative phase, 115
    - nursing skills, 105-106
  - practice exam questions, 117-120
  - resources, 120, 599
  - source of injury, 106
  - TBSA measurement, 108-109
  - terminology, 105

## C

**C spine immobilization, 367**

**calcium, 97**

**calculations, 605**

- apothecary system of measurement, 605
- household system of measurement, 605-606
- metric measurements, 606
- practice, 606

**cancer**

- bladder, 69-70
- categories, 140-141
- Hodgkin's lymphoma, 149-150
- management, 143
  - bone marrow transplantation, 147-149
  - chemotherapy, 145-146
  - PSCT (peripheral stem cell transplantation), 147-149
  - radiation therapy, 144-145
  - TPN (total parenteral nutrition), 146-147
- nursing skills, 139
- pediatric care, 356-357
- practice exam questions, 154-157
- prevention, 143
- resources, 157
- risk factors, 141-142
- terminology, 139
- warning signs, 140

**canes, 202****cannabis abuse, 290****caput succedaneum, 318****carbon monoxide, 111****carcinogenic embryonic acid (CEA), 151****carcinoma, 140****cardiovascular system disorders**

- congenital anomalies, 340-343
- heart block 231-233
- nursing skills, 229-230
- pediatric care, 351
  - KD (Kawasaki's disease), 353-354
  - rheumatic fever, 352
- resources, 602
- terminology, 229

**carditis, 352****casts, 191****CAT (Computerized Adaptive Testing), 8-9****cataracts, 122-123****cations, 90****causes**

- anemia, 78
- metabolic acidosis, 91-92
- metabolic alkalosis, 95
- pneumonia, 48
- respiratory acidosis, 93

**CDCA (chenodeoxycholic acid), 177****CEA (carcinogenic embryonic acid), 151****Celiac disease, 351****CellCept (mycophenolate), 65****central nervous system (CNS), 239, 250****central venous pressure (CVP), 114****central venous pressure monitoring (CVPM), 412****cephalohematoma, 318****cerebral perfusion pressure (CPP), 260****cerebrovascular accidents (strokes), 262-263****cervical cancer, 141****cervical mucus method (contraception), 319****Chadwick's sign, 300****CHD (congenital heart defects), 340**

- COA (coarctation of the aorta), 342
- TOF (Tetralogy of Fallot), 342-343

**chelation therapy, 358****chemical agents (bioterrorism), 375-377****chemical injuries, 106****Chemical Institute Withdrawal Assessment-Alcohol (CIWA-Ar), 287****chemical names (drugs), 22****chemotherapy, 145-146**

- agents, 152
- bladder cancer, 70

**chenodeoxycholic acid (CDCA), 177****chest injuries, 371****CHF (congestive heart failure), 341****childbirth**

- complications
  - abruptio placenta, 307
  - cord prolapse, 307



- diabetes, 305
- DIC (disseminated intravascular coagulation), 307
- maternal infections, 308-310
- placenta previa, 307
- preeclampsia, 306-307
- preterm labor, 310-311
- cultural influences
  - Arab-Americans, 394
  - Asian-Americans, 393
  - Hispanics/Latinos, 390
  - Native Americans/Alaskan Natives, 391
- stages of labor, 311-312
- children. *See* pediatric clients**
- Chlamydia trachomatis, 308**
- chloride, 97**
- cholecystectomy, 178**
- cholecystitis, 176-178**
- cholelithiasis, 176-178**
- cholera, 376**
- cholesterol-lowering agents, 32-33**
- Christianity, 397**
- chronic bronchitis, 46**
- chronic glomerulonephritis, 63-64**
- chronic obstructive pulmonary disease (COPD), 46-47**
- chronic subdural hematomas, 254**
- Church of Jesus Christ of Latter-day Saints, 397**
- Chvostek's sign, 96, 216**
- circulation assessment, 368-369**
- cirrhosis, 172, 174**
- civil laws, 407**
- CIWA-Ar (Chemical Institute Withdrawal Assessment-Alcohol), 287**
- classifications**
  - burn injuries, 106-108
  - pharmacology, 19-20
- cleft lip, 334-335**
- cleft palate, 334-335**
- client ambulation, 412**
- client care management, 411-414**
- client needs, 8-9**
- clinical manifestations. *See* symptoms**
- closed fractures, 188**
- closed head trauma, 370**
- Clostridium difficile*, 178-179**
- clubfoot, 339**
- Cluster A personality disorders, 278-279**
- Cluster B personality disorders, 279-280**
- Cluster C personality disorders, 280-281**
- CNS (central nervous system), 239, 250**
- COA (coarctation of the aorta), 342**
- coarctation of the aorta (COA), 342**
- Code of Ethics for Nursing, 409-410**
- coining practice, 392**
- coitus interruptus (contraception), 319**
- cold application, 412**
- collection of specimens, 412**
- colon cancer, 141**
- colony-stimulating factors (chemotherapy), 145**
- color codes (emergency triage), 379**
- colostrum, 317**
- coma scale, Glasgow, 259-260**
- comminuted fractures, 188**
- common laws, 407-408**
- communication, cultural influences**
  - Arab-Americans, 394
  - Asian-Americans, 393
  - Hispanics/Latinos, 389
  - Native Americans/Alaskan Natives, 391
- compartment syndrome, 191-192**
- compensation, 592**
- complete abortions, 304**
- complete spinal injuries, 263**
- complex partial seizures, 252**

**complications**

AOM (acute otitis media), 345  
 CHD (congenital heart defects), 341  
 hemodialysis, 64  
 hemophilia, 81  
 influenza, 50  
 pregnancy, 303-304  
   abruptio placenta, 307  
   cord prolapse, 307  
   diabetes, 305  
   DIC (disseminated intravascular coagulation), 307  
   maternal infections, 308-310  
   placenta previa, 307  
   preeclampsia, 306-307  
   preterm labor, 310-311  
 SCIs (spinal cord injuries), 264-265  
 TPN (total parenteral nutrition), 146

**compound fractures, 188**

**Computerized Adaptive Testing (CAT), 8-9**

**conduct disorder, 291**

**Condylomata acuminata, 309**

**Congenital Aganglionic Megacolon, 336-337**

**congenital anomalies, 334**  
   cardiovascular system disorders, 340-343  
   cataracts, 122  
   clubfoot, 339  
   GI system disorders, 334-338  
   metabolic disorders, 343-344  
   musculoskeletal system disorders, 338-340

**congenital heart defects (CHD), 242, 340**  
   COA (coarctation of the aorta), 342  
   TOF (Tetralogy of Fallot), 342-343

**congestive heart failure (CHF), 341**

**connective tissue disorders, 601**

**Consensus formula, 112-113**

**consent for care, 411**

**contact precautions, 592**

**contamination, nuclear warfare, 378**

**continuous passive motion (CPM), 198**

**contraception, 319-320**

**contraction stress test, 313**

**contractions (labor), 590**

**control levels, anticoagulant therapy, 590**

**Controlled Substances Act, 289**

**contusions, 128**

**conversion disorder, 276**

**conversion factors**  
   apothecary system of measurement, 605  
   household system of measurement, 605-606  
   metric measurements, 606

**conversion reaction, 592**

**Cooley's anemia, 81**

**COPD (chronic obstructive pulmonary disease), 46-47**

**cord prolapse, 307**

**corneal lacerations, 128**

**corticotrophin releasing hormone, 210**

**coumadin, 590**

**coup (injuries), 370**

**coxa plana, 355**

**CPM (continuous passive motion), 198**

**CPP (cerebral perfusion pressure), 260**

**cranial nerves, 258-259**

**craniofacial deformities, 334-335**

**craniotomy care, 260-261**

**criminal laws, 407**

**Crohn's disease, 163-164**

**crutch-walking gaits, 201**

**crutches, 201**

**Crutchfield tong traction, 190**

**Cullen's sign, 372**

**cultural influences**  
   Arab-Americans, 393-394  
   Asian-Americans, 391-393  
   assessment, 386-387  
   case studies, 398-399

dietary considerations, 395-396  
 Hispanics/Latinos, 388-390  
 Native Americans/Alaskan Natives, 390-391  
 nursing skills, 386  
 practice exam questions, 400-403  
 religious beliefs, 396-398  
 resources, 403, 604  
 terminology, 385

**cultured skin, 115**

**cupping practice, 392**

**Cushing's disease, 219**

**CVP (central venous pressure), 114**

**cyanides, 376**

**cyanotic congenital heart disease, 341**

**cyclosporine (Neoral), 65**

**cystic fibrosis, 349**

**cytoprotectants (chemotherapy), 145**

## D

**debridement, 114**

**decelerations (fetal monitoring), 314**

**decerebrate posture, 255**

**decorticate posture, 256**

**deep partial thickness burns, 107**

**defense mechanisms, 592-593**

**deficits assessment, 369**

**degenerative neurological disorders, 266-267**

**delayed PTSD, 275**

**denial, 592**

**dependent personality disorder, 281**

**depressed skull fractures, 254**

**depression, 285-286**

**developmental hip dysplasia (DHD), 338**

**dextrostix, 222-223**

**DHD (developmental hip dysplasia), 338**

**DI (Diabetes Insipidus), 211-212**

**Diabetes Insipidus (DI), 211-212**

**diabetes mellitus, 219-222, 305**

**diabetic retinopathy, 125**

**Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR), 274**

**diagnostic tests**

Addison's disease, 218

burn injuries, 116

cancer, 151-152

Celiac disease, 351

Crohn's disease, 163

cirrhosis, 173

Clostridium difficile, 179

cystic fibrosis, 349

diabetes mellitus, 220-221

diverticulitis, 165

emergency nursing, 379

endocrine system disorders, 223

galactosemia, 344

gallbladder disease, 177

gastrointestinal system disorders, 180

genitourinary system disorders

acute glomerulonephritis, 62

bladder cancer, 69

BPH (benign prostatic hyperplasia), 68

kidney stones, 66

prostatitis, 68

GERD (gastroesophageal reflux disease), 166

hematological system disorders, 83

Hepatitis A, 168

Hepatitis B, 169

Hepatitis C, 170

Hepatitis D, 171

Hepatitis E, 171

Hirschsprung disease, 337

Hodgkin's lymphoma, 150

hyperthyroidism, 215

iron poisoning, 359

KD (Kawasaki's disease), 353

maternal care, 320-321

musculoskeletal system disorders, 203

## diagnostic tests

neurological system disorders, 267

pancreatitis, 175

parathyroid disorders, 215

PKU (Phenylketonuria), 343

preeclampsia, 306

prenatal care, 302-303

psychiatric system disorders, 293

RA (rheumatoid arthritis), 196

respiratory system disorders

ARDS (acute respiratory distress syndrome), 51

emphysema, 46

Legionnaire's disease, 55

pulmonary embolus, 53

SARS (Severe Acute Respiratory Syndrome), 54

TB (tuberculosis), 50

sensory system disorders, 132

strokes, 262

ulcerative colitis, 164

ulcers, 161

**dialysate, 64****dialysis, 64-65****dialyzer, 64****diastolic pressure, 230****DIC (disseminated intravascular coagulation), 307****DID (dissociative identity disorder), 275****dietary issues**

cultural influences, 395-396

guidelines, 593-594

disease modifications

Celiac disease, 351

cystic fibrosis, 349

gallbladder disease, 177

gastroenteritis, 350

gout, 195

osteoporosis, 194

PKU (Phenylketonuria), 344

pregnancy, 301

ulcers, 161

**diffusion, 90****digoxin, 589****dilantin, 589****dilation (cervix), 313****disaster victims, 379****disease transmission, 591****disequilibrium syndrome, 64****dislocation of the hip, 338****disorders**

cardiac system

congenital anomalies, 340-343

nursing skills, 229-230

pediatric care, 351-354

resources, 602

terminology, 229

connective tissue, 601

endocrine system

adrenal gland disorders, 218-219

anatomy, 210

diabetes mellitus, 219-222

diagnostic tests, 223

parathyroid disorders, 215-217

pharmacology, 223

pituitary disorders, 210-213

practice exam questions, 224-227

resources, 227, 601

terminology, 209

thyroid disorders, 213-215

gastrointestinal system (GI)

cholecystitis, 176-178

cholelithiasis, 176-178

*Clostridium difficile*, 178-179

diagnostic tests, 180

diverticulitis, 165-166

food-borne illnesses, 179

GERD (gastroesophageal reflux disease), 166-167

inflammatory bowel disorders, 163-165

- liver-associated diseases, 167-172, 174-175
- nursing skills, 159
- pediatric care, 350-351
- pharmacology, 180-181
- practice exam questions, 182-184
- resources, 600
- terminology, 159
- ulcers, 160-162
- genitourinary system
  - acute glomerulonephritis, 62-63
  - bladder cancer, 69-70
  - BPH (benign prostatic hyperplasia), 68-69
  - chronic glomerulonephritis, 63-64
  - diagnostic tests, 70
  - ESRD (end stage renal disease), 64-65
  - medications, 70
  - nephrotic syndrome, 65-66
  - nursing skills, 61
  - practice exam questions, 72-74
  - prostatitis, 67-68
  - resources, 75, 598
  - terminology, 61
  - urinary calculi, 66-67
  - UTIs (urinary tract infections), 67
- hematological system
  - anemia, 78-81
  - diagnostic tests, 83
  - hemophilia, 81-82
  - medications, 83
  - nursing skills, 77
  - polycythemia vera, 82
  - practice exam questions, 85-86
  - resources, 87, 598
  - terminology, 77
- metabolic, 343-344
- musculoskeletal system
  - assistive devices, 201-203
  - congenital anomalies, 338-340
  - diagnostic tests, 203
  - fractures, 188-193
  - gout, 195
  - nursing skills, 187
  - osteoporosis, 193-195
  - pediatric care, 354-356
  - pharmacology, 203-204
  - practice exam questions, 205-208
  - RA (rheumatoid arthritis), 195-197
  - resources, 601
  - surgical procedures, 197-200
  - terminology, 187
- neoplastic, 600
- neurological system
  - assessment, 258-260
  - brain injuries, 253-254
  - craniotomy care, 260-261
  - degenerative disorders, 266-267
  - diagnostic tests, 267
  - Guillain-Barré, 265-266
  - increased intracranial pressure, 255-257
  - nursing skills, 249
  - pharmacology, 267-268
  - practice exam questions, 269-272
  - resources, 272, 602
  - SCIs (spinal cord injuries), 263-265
  - seizures, 250-253
  - strokes, 262-263
  - terminology, 249
- psychiatric system
  - anxiety-related disorders, 274-278
  - diagnostic tests, 293
  - emotional/behavioral disorders, 291-293
  - nursing skills, 273-274
  - personality disorders, 278-281
  - pharmacology, 294
  - practice exam questions, 295-298
  - psychotic disorders, 282-286
  - resources, 603
  - substance abuse, 286-290
  - terminology, 273

respiratory system

- acute infections, 47-51
- acute respiratory failure, 51-53
- COPD (chronic obstructive pulmonary disease), 46-47
- diagnostic tests, 55
- emerging infections, 53-55
- medications, 55-56
- nursing skills, 45
- pediatric care, 344-349
- practice exam questions, 57-60
- resources, 60, 597
- terminology, 45

sensory system

- diagnostic tests, 132
- ear disorders, 129-132
- eye disorders, 122-129
- nursing skills, 121-122
- pharmacology, 133
- practice exam questions, 134-137
- resources, 137, 599
- terminology, 121

**displacement, 593**

**disseminated intravascular coagulation (DIC), 307**

**dissociative identity disorder (DID), 275**

**disulfiram (Antabuse), 287**

**diuretics, 19**

**diverticulitis, 165-166**

**documentation, forensic evidence, 372-373**

**dressings**

- burn care, 114-115
- TPN (total parenteral nutrition), 146

**droplet precautions, 592**

**drug levels, therapeutic, 589-590**

**drug names, 22**

**dry macular degeneration, 126**

**DSM-IV-TR (Diagnostic and Statistical Manual of Mental Disorders), 274**

**Duchenne muscular dystrophy, 355**

**dumping syndrome, 162**

**duodenal ulcers, 160**

**duration (labor contractions), 590**

**dysreflexia, 264**

**dystocia, 313**

---

## E

***E. coli*, 179**

**EA (esophageal atresia), 335**

**ear disorders, 129**

- hearing loss, 132
- Meniere's disease, 130-131
- otitis externa, 130
- otitis media, 130
- otosclerosis, 131
- presbycusis, 131
- traumatic injuries, 132

**early decelerations (fetal monitoring), 314**

**eating disorders, 293**

**ECCE (extracapsular cataract extraction), 123**

**echinacea, 39**

**ECSWL (extracorporeal shock wave lithotripsy), 67**

**education of patients**

- cancer prevention, 143
- radiation therapy, 145

**effacement (cervix), 313**

**elective abortions, 304**

**electrical injuries, 106**

**electrolyte balance, 90**

- influence of aging, 98-99
- metabolic acidosis, 91-93
- metabolic alkalosis, 95-96
- normal electrolyte values, 97-98
- nursing skills, 89
- pH regulation, 91
- practice exam questions, 100-102
- resources, 103, 599
- respiratory acidosis, 93-94

respiratory alkalosis, 96-97  
terminology, 89

### **embolus, 52-53**

### **emergency nursing**

ABCD assessment, 366  
airway, 367  
breathing, 367-368  
circulation, 368-369  
deficits, 369  
bioterrorism, 375  
chemical/biological agents, 375-377  
nuclear warfare, 378  
triage categories for victims, 379  
diagnostic tests, 379  
medications, 380  
nursing skills, 365  
poisoning, 373-375  
practice exam questions, 381-384  
resources, 384  
terminology, 365  
trauma, 370  
abdominal injuries, 371-372  
chest injuries, 371  
head injuries, 370-371  
preservation of forensic evidence, 372-373  
triage, 366

### **emergent phase, burn care, 110-111**

### **emerging infections**

Legionnaire's disease, 54-55  
SARS (Severe Acute Respiratory Syndrome),  
53-54

### **emotional disorders, 291**

ADHD, 291  
autistic disorder, 292  
conduct disorder, 291  
eating disorders, 293  
oppositional defiant disorder, 291

### **empacho, 389**

### **emphysema, 46-47**

### **end stage renal disease (ESRD), 64-65**

### **endocrine system disorders**

adrenal gland, 218-219  
anatomy, 210  
diabetes mellitus, 219-222  
diagnostic tests, 223  
parathyroid disorders, 215-217  
pharmacology, 223  
pituitary disorders, 210-213  
practice exam questions, 224-227  
resources, 227, 601  
terminology, 209  
thyroid disorders, 213-215

### **endotracheal care, 413**

### **engrafted bone marrow, 148**

### **enteric-coated tablets, 20**

### **envenomation, 374**

### **epidural block, 316**

### **epidural hematomas, 254**

### **epiglottitis, 347-348**

### **equivalents, 605-606**

### **erythema marginatum, 352**

### **erythroblastosis fetalis, 318**

### **eschar, 114**

### **esophageal atresia (EA), 335**

### **esophageal cancer, 141**

### **ESRD (end stage renal disease), 64-65**

### **ESWL (extracorporeal shock wave lithotripsy), 178**

### **ethics, 409-410**

### **evil eye, 389**

### **Exam I (practice exam), 421-473**

### **Exam II (practice exam), 475-526**

### **exam prep questions**

burn care, 117-120  
cancer, 154-157  
cultural influences, 400-403  
emergency nursing, 381-384  
endocrine system disorders, 224-227

fluid and electrolyte balance, 100-102  
 gastrointestinal system disorders, 182-184  
 genitourinary system disorders, 72-74  
 hematological system disorders, 85-86  
 legal issues, 417-420  
 maternal/infant clients, 322-325  
 musculoskeletal system disorders, 205-208  
 neurological system disorders, 269-272  
 pediatric clients, 360-362  
 pharmacology, 41-43  
 psychiatric system disorders, 295-298  
 resources, 420  
 respiratory system disorders, 57-60  
 sensory system disorders, 134-137  
 strategies, 13-15  
 terminology, 405

**explanations (practice exams), 529-587**

**external bleeding, 368**

**external radiation (nuclear warfare), 378**

**extracapsular cataract extraction (ECCE), 123**

**extracellular fluid, 90**

**extracorporeal shock wave lithotripsy (ESWL), 67, 178**

**extrinsic asthma, 47**

**exudative macular degeneration, 126**

**eye disorders, 122**

- intraocular disorders, 122
  - cataracts, 122-123
  - glaucoma, 123-125
- pharmacology, 129
- refractive errors, 127-128
- retinal disorders, 125
  - diabetic retinopathy, 125
  - hypertensive retinopathy, 125
  - macular degeneration, 126
  - retinal detachment, 126-127
- traumatic injuries, 128
- visual tests, 129

---

## F

**facial nerve, 258**

**farsightedness (hyperopia), 127**

**fasciotomy, 192**

**fasting blood glucose, 220, 223**

**fat emboli, 52**

**felony, 407**

**fetal bradycardia, 313**

**fetal heart rate**

- assessment, 303
- normal ranges, 590

**fetal lie, 313**

**fetal monitoring, 314-316**

**fetal tachycardia, 313**

**feverfew, 38**

**filtration, 90**

**first degree burns, 107**

**flail chest, 371**

**fluid and electrolyte balance, 90**

- influence of aging, 98-99
- metabolic acidosis, 91-93
- metabolic alkalosis, 95-96
- normal electrolyte values, 97-98
- nursing skills, 89
- pH regulation, 91
- practice exam questions, 100-102
- resources, 103
- respiratory acidosis, 93-94
- respiratory alkalosis, 96-97
- terminology, 89

**Flumazenil (Romazicon), 94**

**focal seizures, 252**

**folk medicine, 386**

**follicle-stimulating hormone, 210**

**food-borne illnesses, 179**

**foreign bodies, eyes, 128**

**forensic evidence preservation, 372-373**



**Forteo, 217**

**four-foot adjustable canes, 202**

**four-point gait (crutch-walking), 201**

**fractures, 188**

basilar skull, 253

compartment syndrome, 191-192

depressed skull fractures, 254

hip replacement, 197-198

nondepressed skull fractures, 254

osteomyelitis, 192-193

treatment, 188-189

casts, 191

traction, 189-191

**fraud, 411**

**Fredet-Ramstedt procedure, 351**

**frequency (labor contractions), 590**

**fright sickness, 389**

**full thickness burns, 107**

## G

**GAD (generalized anxiety disorder), 274**

**gait belt, 203**

**gaits, 201**

**galactosemia, 344**

**gallbladder disease, 176**

**garamycin, 49**

**Gardasil vaccine, 141**

**gastrectomy, 162**

**gastric ulcers, 161**

**gastroenteritis, 350**

**gastroesophageal reflux disease (GERD), 166-167**

**gastrointestinal (GI) system disorders. *See* GI system disorders**

**gastrostomy feedings, 336**

**general anesthesia, 317**

**generalized anxiety disorder (GAD), 274**

**generalized seizures, 250-252**

**generic names (drugs), 22**

**Genital herpes, 309**

**genitourinary system**

acute glomerulonephritis, 62-63

bladder cancer, 69-70

BPH (benign prostatic hyperplasia), 68-69

chronic glomerulonephritis, 63-64

diagnostic tests, 70

ESRD (end stage renal disease), 64-65

medications, 70

nephrotic syndrome, 65-66

nursing skills, 61

practice exam questions, 72-74

prostatitis, 67-68

resources, 75, 598

terminology, 61

urinary calculi, 66-67

UTIs (urinary tract infections), 67

**GERD (gastroesophageal reflux disease), 166-167**

**gestational diabetes, 305**

**GH-RH (growth hormone releasing hormone), 210**

**GI (gastrointestinal) system disorders**

cholecystitis, 176-178

cholelithiasis, 176-178

*Clostridium difficile*, 178-179

congenital anomalies, 334-338

diagnostic tests, 180

diverticulitis, 165-166

food-borne illnesses, 179

gastroenteritis, 350

Celiac disease, 351

intussusception, 351

pyloric stenosis, 350

GERD (gastroesophageal reflux disease), 166-167

inflammatory bowel disorders, 163

Chrohn's disease, 163-164

ulcerative colitis, 164-165

## GI (gastrointestinal) system disorders

liver-associated diseases, 167  
 cirrhosis, 172-174  
 hepatitis, 167-172  
 pancreatitis, 174-175  
 nursing skills, 159  
 pediatric care, 350  
 pharmacology, 180-181  
 practice exam questions, 182-184  
 resources, 600  
 terminology, 159  
 ulcers, 160-162

**gigantism, 211**

**ginkgo, 39**

**ginseng, 39**

**Glasgow coma scale, 259-260**

**glaucoma, 123-125**

**glomerulonephritis, 62-64**

**glossopharyngeal nerve, 258**

**glucocorticoids, 29-30**

**glucose tolerance test (GTT), 220, 223**

**gluten-induced enteropathy, 351**

**glycosylated hemoglobin assays (HbA1c), 221-223**

**goiter, 214**

**gonadotrophic hormone, 211**

**gonorrhea, 308**

**Goodell's sign, 300**

**gout, 195**

**grand mal seizures, 250**

**Graves' disease, 214-215**

**green stick fractures, 188**

**ground glass infiltrates (SARS), 54**

**Group A beta hemolytic streptococcus, 346**

**growth and development (pediatric care), 328**  
 adolescents, 333  
 infants, 328-329  
 preschoolers, 331-332  
 school age children, 332-333  
 toddlers, 330

**growth hormone, 210**

**growth hormone releasing hormone (GH-RH), 210**

**GTT (glucose tolerance test), 220, 223**

**Guillain-Barré, 265-266**

**Guthrie test, 344**

---

**H**

***H. influenza***  
 acute epiglottitis, 347  
 acute otitis media, 345

**H. influenza B conjugate vaccine, 347**

***H. Pylori* bacteria, 160**

**hallucinogen abuse, 290**

**halo vest, 264**

**hazardous substances, pediatric clients**  
 acetaminophen overdose, 357  
 iron poisoning, 358  
 lead poisoning, 358  
 salicylate overdose, 357

**HbA1c (glycosylated hemoglobin assays), 221-223**

**HCG (human chorionic gonadotropin), 304**

**head injuries, 370-371**

**healers, 388**

**Health Information Protection Privacy Act (HIPPA), 408**

**hearing loss, 132**

**heart block, 231-233**

**heart rate, 589**

**heat application, 412**

**Hegar's sign, 301**

**HELLP syndrome, 306**

**hematological system**  
 anemia, 78  
 aplastic, 79  
 Cooley's, 81  
 iron deficiency, 80-81  
 pernicious, 78-79  
 sickle cell, 80

- diagnostic tests, 83
  - hemophilia, 81-82
  - medications, 83
  - nursing skills, 77
  - polycythemia vera, 82
  - practice exam questions, 85-86
  - resources, 87, 598
  - terminology, 77
  - hemodialysis, 64-65**
  - hemophilia, 81-82**
  - hemorrhage**
    - abdominal injuries, 371
    - brain injuries, 254
  - hemorrhagic strokes, 262**
  - hepatic portoenterostomy, 338**
  - hepatitis, 167**
    - Hepatitis A, 168
    - Hepatitis B, 169-170
    - Hepatitis C, 170-171
    - Hepatitis D, 171
    - Hepatitis E, 171
    - Hepatitis G, 171
    - stages, 171-172
  - herbs, 38-39**
  - heterografts, 115**
  - HHNKS (hyperosmolar hyperglycemic nonketotic syndrome), 220**
  - Hinduism, 392, 397**
  - hip replacement, 197-198**
  - HIPPA (Health Information Protection Privacy Act), 408**
  - Hirschsprung disease, 336-337**
  - Hispanics, cultural influences, 388-390**
  - histamine 2 antagonists, 34-35**
  - histrionic personality disorder, 279**
  - HIV (human immunodeficiency virus), 310**
  - Hodgkin's lymphoma, 149**
    - diagnosis, 150
    - prognosis, 150
    - risk factors, 141
    - treatment, 150
  - homografts, 115**
  - hormones, 210**
    - chemotherapy, 145
    - contraception, 320
  - hot diseases (Hispanic culture), 388**
  - hot/cold theory, Asian-Americans, 392**
  - household system of measurement, 605-606**
  - human chorionic gonadotropin (HCG), 304**
  - human immunodeficiency virus (HIV), 310**
  - hydatidiform mole, 304**
  - hymenopterans, 374**
  - hyperbilirubinemia, 318**
  - hyperemesis gravidarum, 303**
  - hyperkalemia, 93**
  - hyperopia (farsightedness), 127**
  - hyperosmolar hyperglycemic nonketotic syndrome (HHNKS), 220**
  - hyperparathyroidism, 217**
  - hypertension, 230**
  - hypertensive retinopathy, 125**
  - hyperthyroidism, 214-215**
  - hyphema, 128**
  - hypochondriasis, 276**
  - hypoglossal nerve, 259**
  - hypokalemia, 92**
  - hypoparathyroidism, 216-217**
  - hypothalamus, 210**
  - hypothyroidism, 213-214**
  - hypovolemic shock, 368**
- 
- I**
  - ICP (intracranial pressure), 254-257, 260**
  - icteric stage (hepatitis), 171-172**
  - identification helpers (drugs), 38**
  - Imferon (intramuscular iron), 81**
  - immunization schedule, 594**

**immunizations, 51****imperforate anus, 336****inadequate breathing, 368****incompetent cervix, 303****incomplete abortions, 304****incomplete spinal injuries, 263****incorporation (nuclear warfare), 378****increased intracranial pressure, 254-257, 260****inevitable abortions, 304****Infalyte, 350****infants**

- growth and development, 328-329
- hypothyroid symptoms, 214
- immunization schedule, 594
- increase intracranial pressure symptoms, 256
- maternal/infant care, 299
- meningitis, 340
- preterm, 311

**infections**

- acute respiratory infections, 47
  - influenza, 50-51
  - pleurisy, 49
  - pneumonia, 48-49
  - TB (tuberculosis), 50
- burn victims, 114
- control, 414
- maternal, 308-310
- UTIs (urinary tract infections), 67

**infective endocarditis, 239****inflammatory bowel disorders, 163**

- Chrohn's disease, 163-164
- ulcerative colitis, 164-165

**influence of culture**

- Arab-Americans, 393-394
- Asian-Americans, 391-393
- assessment, 386-387
- case studies, 398-399
- dietary considerations, 395-396
- Hispanics/Latinos, 388-390
- Native Americans/Alaskan Natives, 390-391

nursing skills, 386

practice exam questions, 400-403

religious beliefs, 396-398

terminology, 385

**influenza, 50-51****informed consent, 411****infratentorial surgery, 261****ingestion of hazardous substances, pediatric clients**

- acetaminophen overdose, 357
- iron poisoning, 358
- lead poisoning, 358
- salicylate overdose, 357

**INR (international normalizing ratio), 590****insulin, 221****intact corneal ring, 128****Integra, 115****intensity (labor contractions), 590****intentional tort, 411****intermediate phase (burn care), 113-114****international normalizing ratio (INR), 590****intra-abdominal bleeding, 372****intracellular fluid, 90****intracranial pressure (ICP), 254-257, 260****intramuscular iron (Imferon), 81****intraocular disorders**

- cataracts, 122-123
- glaucoma, 123-125

**intrapartal care, 311-313, 590****intrauterine device (IUD), 320****intrinsic asthma, 47****intussusception, 351****iron deficiency anemia, 80-81****iron poisoning, 358****ischemic strokes, 262****Ishihara polychromatic chart, 129****isoimmunization, 318****IUD (Intrauterine device), 320****IV therapy, 413**

---

**J**


---

jaundice, 319  
 jaw-thrust maneuver, 367  
 Jehovah's Witnesses, 397  
 Judaism, 397

---

**K**


---

Kasai procedure, 338  
 kava-kava, 39  
 KD (Kawasaki's disease), 353-354  
 Kehr's sign, 372  
 kernicterus, 318  
 ketonuria, 220  
 keywords, 10  
 kidneys  
   buffer system, 91  
   stones, 66-67  
 knee replacements, 198-199

---

**L**


---

L/S (lecithin/sphingomyelin) ratios, 302  
 lab values, therapeutic drug levels, 589-590  
 labor (pregnancy)  
   pharmacological management, 316-317  
   phases of, 312  
   stages of, 311  
 language assessment, 387  
 Laparoscopic Nissen Fundoplication (LNF), 167  
 laryngotracheobronchitis (LTB), 347  
 larynx cancer, 141  
 laser in-situ keratomileusis (LASIK), 127  
 LASIK (laser in-situ keratomileusis), 127  
 late decelerations (fetal monitoring), 315  
 Latinos, cultural influences, 388-390

laws. *See* legal issues  
 laxatives, 19  
 lead poisoning, 358  
 lecithin/sphingomyelin (L/S) ratios, 302  
 left occiput anterior (LOA), 312  
 legal issues, 406  
   case study, 414-416  
   civil laws, 407  
   client care management, 411-414  
   common laws, 407-408  
   criminal laws, 407  
   legal theories, 410-411  
   practice exam questions, 417-420  
   resources, 420, 604  
   statutory laws, 407  
   terminology, 405  
 legal theories, 410-411  
 Legg-Calve-Perthes Disease, 355  
 Legionnaire's disease, 54-55  
 leukemia, 141  
   pediatric care, 356  
   risk factors, 141  
 life support guidelines (AHA), 592  
 lithium, 285, 589  
 liver cancer, 141  
 liver-associated diseases, 167  
   cirrhosis, 172-174  
   hepatitis, 167  
     Hepatitis A, 168  
     Hepatitis B, 169-170  
     Hepatitis C, 170-171  
     Hepatitis D, 171  
     Hepatitis E, 171  
     Hepatitis G, 171  
     stages, 171-172  
   pancreatitis, 174-175  
 LNF (Laparoscopic Nissen Fundoplication), 167  
 LOA (left occiput anterior), 312

local infiltration (nerve block)

**local infiltration (nerve block), 316**

**lochia alba, 317**

**lochia rubra, 317**

**lochia serosa, 317**

**LTB (laryngotracheobronchitis), 347**

**Lund and Browder method (TBSA determination), 108**

**lungs**

buffer system, 91

cancer, 142

**luteinizing hormone, 210**

**lymphoid tissue, 346**

**lymphoma, 140, 149-150**

## M

**Ma Huang, 39**

**macular degeneration, 126**

**magnesium, 98**

**magnesium gluconate, 306**

**magnesium sulfate, 306, 310**

**magnetic resonance images (MRIs), 151**

**major burns, 106, 109-111**

**major depression (bipolar disorders), 285-286**

**maladaptive beliefs, 386**

**malignancy. See cancer**

**malignant cells, 140**

**malpractice, 410**

**management**

acute glomerulonephritis, 63

Addison's disease, 218

airway, 367

anemia, 79-81

anxiety disorders, 277

ARDS (acute respiratory distress syndrome), 51

asthma, 47

autism, 292

biliary atresia, 338

bladder cancer, 70

BPH (benign prostatic hyperplasia), 68

bronchiolitis, 348

cancer, 143

bone marrow transplantation, 147-149

chemotherapy, 145-146

PSCT (peripheral stem cell transplantation), 147-149

radiation therapy, 144-145

TPN (total parenteral nutrition), 146-147

cannabis abuse, 290

casts, 191

chronic glomerulonephritis, 64

cirrhosis, 173

client care, 411-414

COA (coarctation of the aorta), 342

Crohn's disease, 163

Cushing's disease, 219

DHD (developmental hip dysplasia), 338

DI (diabetes insipidus), 212

diabetes mellitus, 221

diverticulitis, 166

dysreflexia, 265

epidural hematomas, 254

fractured hip, 197

gallbladder disease, 177-178

GERD (gastroesophageal reflux disease), 166

glaucoma, 124-125

gout, 195

Guillain-Barré, 266

hallucinogen abuse, 290

hemophilia, 82

hepatitis, 167

Hepatitis A, 168

Hepatitis B, 169

Hepatitis C, 170

Hirschsprung disease, 337

Hodgkin's lymphoma, 150

hyperparathyroidism, 217

hyperthyroidism, 215

- hypoparathyroidism, 217
- hypothyroidism, 214
- increased intracranial pressure, 257
- influenza, 51
- KD (Kawasaki's disease), 353
- kidney stones, 66
- Legionnaire's disease, 55
- Meniere's disease, 131
- metabolic acidosis, 92-93
- metabolic alkalosis, 96
- nephrotic syndrome, 66
- nuclear warfare radiation disasters, 378
- opiate abuse, 289
- osteogenic sarcoma, 357
- osteoporosis, 194-195
- otosclerosis, 131
- pancreatitis, 175
- personality disorders, 281
- pituitary tumors, 212
- pleurisy, 49
- pneumonia, 48-49
- polycythemia vera, 82
- preeclampsia, 306
- prostatitis, 68
- pulmonary embolus, 53
- pyloric stenosis, 350
- RA (rheumatoid arthritis), 196-197
- respiratory acidosis, 94
- respiratory alkalosis, 97
- retinal detachment, 126-127
- SARS (Severe Acute Respiratory Syndrome), 54
- sedative-hypnotic abuse, 289
- seizures, 252
- SIADH (syndrome of inappropriate antidiuretic hormone), 211
- spina bifida, 340
- stimulant abuse, 289
- stings/bites, 374
- strokes, 262
- subdural hematomas, 254
- TB (tuberculosis), 50
- TOF (Tetralogy of Fallot), 343
- tonsillitis, 346-347
- ulcerative colitis, 165
- ulcers, 161-162
- UTIs (urinary tract infections), 67
- venomous snake bites, 374
- manic episodes (bipolar disorders), 284-285**
- Mantoux skin test, 50**
- manual traction, 189**
- MAOIs (monoamine oxidase inhibitors), 285**
- MAP (mean arterial pressure), 260**
- marijuana abuse, 290**
- maternal infections, 308-310**
- maternal/infant clients**
  - abortions, 304-305
  - complications, 303-304
    - abruptio placenta, 307
    - cord prolapse, 307
    - diabetes, 305
    - DIC (disseminated intravascular coagulation), 307
    - maternal infections, 308-310
    - placenta previa, 307
    - preeclampsia, 306-307
    - preterm labor, 310-311
  - contraception, 319-320
  - diagnostic tests, 320-321
  - fetal monitoring, 314-316
  - intrapartal care, 311-313
  - normal newborn terminology, 317-318
  - nursing skills, 299
  - pharmacological management of labor, 316-317
  - pharmacology, 321
  - postpartum care, 317
  - practice exam questions, 322-325
  - prelabor testing, 313-314
  - prenatal care, 301

## maternal/infant clients

- alpha-fetoprotein screening, 301-302
- diagnostic tests, 302-303
- diet and weight control, 301
- fetal heart tone assessment, 303
- ultrasonography, 303

resources, 603

Rh incompatibility, 318-319

signs of pregnancy, 300-301

terminology, 299

**math calculations, 605-606****mean arterial pressure (MAP), 260****measurements, TBSA (burns), 108-109****medications, 18**

- administration, 21, 413
- angiotensin receptor blockers, 33-34
- angiotensin-converting enzyme inhibitors, 22-23
- anti-infectives, 25-26
- anticoagulants, 37-38
- anticonvulsants, 26-27
- antiemetics, 28-29
- antivirals, 31-32
- beta adrenergic blockers, 23-24
- bone marrow transplant, 149
- burn care, 114
- burn injuries, 116
- cancer, 152-153
- cardiac system, 243
- cholesterol-lowering agents, 32-33
- cirrhosis, 173
- classifications, 19-20
- craniotomy care, 261
- drug identification helpers, 38
- drug names, 22
- drug schedules, 39-40
- emergency nursing, 380
- endocrine system disorders, 223
- eye disorders, 129
- gastrointestinal system disorders, 180-181

- genitourinary system disorders
  - acute glomerulonephritis, 63
  - bladder cancer, 70
  - BPH (benign prostatic hyperplasia), 68
  - chronic glomerulonephritis, 64

glucocorticoids, 29-30

gout, 195

hematological system disorders, 83

histamine 2 antagonists, 34-35

hypertension, 230

increased intracranial pressure, 257

labor, 316-317

maternal care, 321

medicinal properties of herbs, 38-39

most-prescribed medications in U.S., 609-611

musculoskeletal system disorders, 203-204

neurological system disorders, 267-268

nursing skills, 17-18

osteoporosis, 194

pancreatitis, 175

pediatric care, 359

pharmacodynamics, 18

pharmacokinetics, 18

pharmacotherapeutics, 18

pneumonia, 48

practice exam questions, 41-43

pregnancy categories, 40

preterm labor, 310

proton pump inhibitors, 36

psychiatric system disorders, 294

RA (rheumatoid arthritis), 196

renal transplantation, 65

resources, 597

respiratory system disorders

- asthma, 47

- emphysema, 46

- influenza, 51

- Legionnaire's disease, 55

- pleurisy, 49

- pneumonia, 48-49

- pulmonary embolus, 53



- SARS (Severe Acute Respiratory Syndrome), 54
- TB (tuberculosis), 50
- schizophrenia, 283
- sensory system disorders, 133
- strokes, 262
- terminology, 17
- therapeutic drug levels, 589-590
- time-released drugs, 20
- medicine men, 390**
- melanocyte-stimulating hormone, 210**
- Meniere's disease, 130-131**
- meningitis, 340**
- meningocele, 339**
- metabolic acidosis, 91-93**
- metabolic alkalosis, 95-96**
- metabolic disorders, 343-344**
- metastasis, 140**
- methicillin-resistant staphylococcus aureus (MRSA), 26**
- metric measurements, 606**
- milia, 318**
- minor burns, 106, 109**
- miotic eye drops, 124**
- miotics, 20**
- misdemeanor, 407**
- missed abortions, 304**
- moderate burns, 106, 109**
- mongolian spots, 318**
- monitors**
  - fetal, 314-316
  - intracranial pressure, 260
- monoamine oxidase inhibitors (MAOIs), 285**
- Mormons, 397**
- motor vehicle accidents (MVAs), 370**
- MRI (magnetic resonance images), 151**
- MRSA (methicillin-resistant staphylococcus aureus), 26**
- multiple myeloma, 142**
- multiple personality disorder, 275**
- multiple sclerosis, 266-267**
- muscular dystrophies, 355-356**
- musculoskeletal system disorders**
  - assistive devices, 201-203
  - congenital anomalies, 338-340
  - diagnostic tests, 203
  - fractures, 188
    - compartment syndrome, 191-192
    - osteomyelitis, 192-193
    - treatment, 188-191
  - gout, 195
  - nursing skills, 187
  - osteoporosis, 193-195
  - pediatric care, 354-356
  - pharmacology, 203-204
  - practice exam questions, 205-208
  - RA (rheumatoid arthritis), 195-197
  - resources, 601
  - surgical procedures, 197
    - amputations, 199-200
    - hip replacement, 197-198
    - total knee replacements, 198-199
  - symptoms, 191
  - terminology, 187
- Muslims, 393**
- MVAs (motor vehicle accidents), 370**
- myasthenia gravis, 266-267**
- mycophenolate (CellCept), 65**
- mydriatics, 20**
- myelomeningocele, 339**
- myocardial infarction, 234-238**
- myopia (nearsightedness), 127**

---

## N

- naloxone hydrochloride (Narcan), 94**
- Narcan (naloxone hydrochloride), 94**
- narcissistic personality disorder, 279**

**narcotics, 20, 94**

**narrow-angle glaucoma, 124**

**nasogastric (NG) tubes, 413**

**National Council of State Boards of Nursing (NCSBN), 406, 411**

**Native Americans, cultural influences, 390-391**

**Navajo medicine men, 390**

**NCSBN (National Council of State Boards of Nursing), 406, 411**

**nearsightedness (myopia), 127**

**negative symptoms, schizophrenia, 282**

**negligence, 410**

**neoplastic disorders, 600**

**Neoral (cyclosporine), 65**

**nephroblastoma, 356**

**nephrotic syndrome, 65-66**

**nerve agents, 375**

**nerve blocks, 316**

**neural tube defects, 339**

**neurological system disorders**

assessment, 258-260

brain injuries, 253-254

craniotomy care, 260-261

degenerative disorders, 266-267

diagnostic tests, 267

Guillain-Barré, 265-266

increased intracranial pressure, 255-257

nursing skills, 249

pharmacology, 267-268

practice exam questions, 269-272

resources, 272, 602

SCIs (spinal cord injuries), 263-265

seizures, 250

generalized, 250-252

partial, 252

status epilepticus, 253

treatment, 252

strokes, 262-263

terminology, 249

**neurotic disorders. *See* anxiety-related disorders**

**neurotransmitters, 274**

**neutral beliefs, 386**

**newborns**

care, 603

normal blood pressure, 589

normal heart rate, 589

terminology, 317-318

**NG (nasogastric) tubes, 413**

**Non-Hodgkin's lymphoma, 142**

**non-stress test, 313**

**nonallergenic asthma, 47**

**noncardiogenic pulmonary edema, 51-52**

**nondepressed skull fractures, 254**

**nonverbal communication, cultural influences**

Arab-Americans, 394

Asian-Americans, 393

Hispanics/Latinos, 389

Native Americans/Alaskan Natives, 391

**NPH insulin, 221**

**nuclear warfare (bioterrorism), 378**

**Nurse Practice Acts, 406-407, 414**

**nursing boards, 613-627**

**nursing considerations. *See also* nursing skills**

alcohol withdrawal, 287

angiotensin receptor blockers, 34

angiotensin-converting enzyme inhibitors, 23

anti-infectives, 25

anticoagulants, 37

anticonvulsants, 27

antiemetics, 29

antivirals, 32

anxiety disorders, 277

beta adrenergic blockers, 24

bone marrow transplant, 148-149

chelation therapy, 358

cholesterol-lowering agents, 33

cleft lip/palate surgical patients, 334-335

client care management, 411-414  
 contracture prevention, 200  
 craniotomy care, 260-261  
 eating disorders, 293  
 glucocorticoids, 30  
 histamine 2 antagonists, 35  
 increased intracranial pressure, 257  
 KD (Kawasaki's disease), 353-354  
 major depression, 285  
 mania, 285  
 metabolic acidosis, 93  
 neurological system disorders, 268  
 osteomyelitis treatment, 193  
 post amputation surgery, 200  
 post-operative care for fractured hips, 198  
 post-operative care for total knee  
   replacements, 198  
 proton pump inhibitors, 36  
 RA (rheumatoid arthritis), 197  
 radiation therapy, 144  
 schizophrenia, 283  
 SIADH (syndrome of inappropriate antidi-  
   uretic hormone), 211  
 spinal cord injuries, 263  
 thyroid surgery, 215  
 tonic-clonic seizures, 251  
 TPN (total parenteral nutrition), 147

#### **nursing guidelines, standard precautions, 591-592**

#### **nursing process, 8**

#### **nursing skills. *See also* nursing considerations**

burn care, 105-109  
   dressings, 114-115  
   emergent phase, 110-111  
   intermediate phase, 113-114  
   rehabilitative phase, 115  
 cancer, 139  
 cardiac system disorders, 229-230  
 cultural influences, 386  
 emergency nursing, 365  
 fluid and electrolyte balance, 89

gastrointestinal system disorders, 159  
 genitourinary system disorders, 61  
 hematological system disorders, 77  
 maternal/infant care, 299  
 musculoskeletal system disorders, 187  
 neurological system disorders, 249  
 pediatric care, 327-328  
 pharmacology, 17-18  
 psychiatric system disorders, 273-274  
 respiratory system disorders, 45  
 sensory system disorders, 121-122  
 thoracentesis, 49

#### **nutrition, dietary guidelines, 593-594**

## O

#### **OA (occiput anterior), 312**

#### **obsessive-compulsive disorder (OCD), 277-278**

#### **obsessive-compulsive personality disorder, 281**

#### **obstetric clients**

abortions, 304-305  
 complications, 303-304  
   abruptio placenta, 307  
   cord prolapse, 307  
   diabetes, 305  
   DIC (disseminated intravascular coagula-  
   tion), 307  
   maternal infections, 308-310  
   placenta previa, 307  
   preeclampsia, 306-307  
   preterm labor, 310-311  
 contraception, 319-320  
 diagnostic tests, 320-321  
 fetal monitoring, 314-316  
 intrapartal care, 311-313  
 normal newborn terminology, 317-318  
 nursing skills, 299  
 pharmacological management of labor,  
   316-317  
 pharmacology, 321

postpartum care, 317  
 practice exam questions, 322-325  
 prelabor testing, 313-314  
 prenatal care, 301
 

- alpha-fetoprotein screening, 301-302
- diagnostic tests, 302-303
- diet and weight control, 301
- fetal heart tone assessment, 303
- ultrasonography, 303

 Rh incompatibility, 318-319  
 signs of pregnancy, 300-301  
 terminology, 299

**occiput anterior (OA), 312**

**OCD (obsessive-compulsive disorder), 277-278**

**OCT (oxytocin challenge test), 313**

**offset adjustable canes, 202**

**olfactory nerve, 258**

**open head trauma, 370**

**opiate abuse, 289**

**oppositional defiant disorder, 291**

**optic nerve, 258**

**osmosis, 90**

**osteogenic sarcoma, 357**

**osteomyelitis, 192-193**

**osteoporosis, 193-195**

**otitis externa, 130**

**otitis media, 130**

**otorrhea, 253**

**otosclerosis, 131**

**ovarian cancer, 142**

**oxytocin, 211**

**oxytocin challenge test (OCT), 313**

## P

---

**pain (deficit assessment), 369**

**pain disorder, 276**

**pain response, cultural influences**

- Arab-Americans, 394
- Asian-Americans, 393
- Hispanics/Latinos, 390
- Native Americans/Alaskan Natives, 391

**Palivizumab (Synagis), 349**

**palm method (TBSA determination), 109**

**pancreatic cancer, 142**

**pancreatic enzyme replacement, 349**

**pancreatitis, 174-175**

**panic disorder, 276**

**Papanicolaou (Pap) test, 143**

**paranoid personality disorder, 278**

**parathormone, 216**

**parathyroid disorders, 215-217**

**Parkinson's disease, 266-267**

**Parkland formula, 111-112**

**Parlodel (Bromocriptine mesylate), 213**

**partial seizures, 252**

**partial thromboplastin time (PTT), 590**

**passageway (birth canal), 311**

**passenger (labor process), 311**

**patent ductus arteriosus, 341**

**pathological fractures, 188**

**patient teaching**

- cancer prevention, 143
- radiation therapy, 145

**Patient's Bill of Rights, 21, 408**

**Pavlik harness, 339**

**peak and trough levels, 26**

**Pedialyte, 350**

**pediatric clients**

- cancer, 356
  - ingestion of hazardous substances, 357-358
  - leukemia, 356
  - osteogenic sarcoma, 357
  - Wilm's tumor, 356

- cardiovascular system disorders, 351
  - KD (Kawasaki's disease), 353-354
  - rheumatic fever, 352
- congenital anomalies, 334
  - cardiovascular system disorders, 340-343
  - GI system disorders, 334-338
  - metabolic disorders, 343-344
  - musculoskeletal system disorders, 338-340
- diagnostic tests, 359
- gastrointestinal system disorders, 350-351
- growth and development, 328
  - adolescents, 333
  - infants, 328-329
  - preschoolers, 331-332
  - school age children, 332-333
  - toddlers, 330
- musculoskeletal system disorders, 354
  - Legg-Calve-Perthes Disease, 355
  - muscular dystrophies, 355-356
  - scoliosis, 354-355
- nursing skills, 327-328
- pharmacology, 359
- practice exam questions, 360-362
- resources, 363, 603
- respiratory system disorders, 344
  - acute epiglottitis, 347-348
  - AOM (acute otitis media), 345
  - bronchiolitis, 348-349
  - cystic fibrosis, 349
  - LTB (laryngotracheobronchitis), 347
  - tonsillitis, 346-347
- terminology, 327
- penetrating injuries, 128, 371**
- pericarditis, 239**
- peripheral stem cell transplantation (PSCT), 147-149**
- peripherally inserted central venous catheters (PICCs), 413**
- peritoneal dialysis, 64**
- permanent grafts, 115**
- pernicious anemia, 78-79**
- personality disorders, 278**
  - Cluster A disorders, 278-279
  - Cluster B disorders, 279-280
  - Cluster C disorders, 280-281
  - management, 281
- petit mal seizures, 252**
- pH regulation, 91**
- pharmacodynamics, 18**
- pharmacokinetics, 18**
- pharmacology. *See* medications**
- pharmacotherapeutics, 18**
- phases of labor, 312**
- phenothiazines, 28-29**
- phenylalanine, 343**
- Phenylketonuria (PKU), 343-344**
- phobic disorders, 277**
- phosphorus, 98**
- photorefractive keratotomy (PRK), 127**
- physical assessment**
  - ABCD assessment, 366
    - airway, 367
    - breathing, 367-368
    - circulation, 368-369
    - deficits, 369
  - abdominal injuries, 371
  - ARDS (acute respiratory distress syndrome), 51
  - emphysema, 46
- physical therapy, knee replacements, 199**
- physiologic jaundice, 319**
- PICCs (peripherally inserted central venous catheters), 413**
- PIH (prolactin inhibiting hormone), 210**
- pinching practice, 392**
- pink puffers, 46**
- pit vipers, 374**
- pituitary disorders, 210-213**

**PKU (Phenylketonuria), 343-344****placenta previa, 307****plague, 376****plasmapheresis, 266****pleurisy, 49****plumbism, 358****pneumonia, 48-49****pneumothorax, 49****POAG (primary open-angle glaucoma), 123****Poison Prevention Packaging Act of 1970, 357****poisoning**

pediatric care, 357-358

stings and bites, 373-375

**polycythemia vera, 82****polydipsia, 220****polymigratory arthritis, 352****polyphagia, 220****polyuria, 220****position (fetal), 312****position (labor process), 311****positional congenital clubfoot, 339****positive signs of pregnancy, 301****positive symptoms, schizophrenia, 282****post-traumatic stress disorder (PTSD), 275****postictal period (seizures), 251****postpartum care, 317****potassium, 93, 97****powers (labor process), 311****PPD (Purified Protein Derivative), 50****practice exam questions**

burn care, 117-120

cancer, 154-157

cultural influences, 400-403

emergency nursing, 381-384

endocrine system disorders, 224-227

fluid and electrolyte balance, 100-102

gastrointestinal system disorders, 182-184

genitourinary system disorders, 72-74

hematological system disorders, 85-86

legal issues, 417-420

maternal/infant clients, 322-325

musculoskeletal system disorders, 205-208

neurological system disorders, 269-272

pediatric clients, 360-362

pharmacology, 41-43

psychiatric system disorders, 295-298

respiratory system disorders, 57-60

sensory system disorders, 134-137

strategies, 13-15

**practice exams**

answers and explanations, 529-587

Exam I, 421-473

Exam II, 475-526

**precipitate delivery, 313****preeclampsia, 306-307****pregnancy**

abortions, 304-305

complications, 303-304

abruptio placenta, 307

cord prolapse, 307

diabetes, 305

DIC (disseminated intravascular coagulation), 307

maternal infections, 308-310

placenta previa, 307

preeclampsia, 306-307

preterm labor, 310-311

contraception, 319-320

diagnostic tests, 320-321

drug categories, 40

fetal monitoring, 314-316

intrapartal care, 311-313

normal newborn terminology, 317-318

nursing skills, 299

pharmacological management of labor, 316-317

pharmacology, 321

postpartum care, 317

- practice exam questions, 322-325
- prelabor testing, 313-314
- prenatal care, 301
  - alpha-fetoprotein screening, 301-302
  - diagnostic tests, 302-303
  - diet and weight control, 301
  - fetal heart tone assessment, 303
  - ultrasonography, 303
- Rh incompatibility, 318-319
- signs of, 300-301
- terminology, 299
- prelabor testing, 313-314**
- premature rupture of membranes, 304**
- prenatal care, 301**
  - alpha-fetoprotein screening, 301-302
  - diagnostic tests, 302-303
  - diet and weight control, 301
  - fetal heart tone assessment, 303
  - ultrasonography, 303
- prep questions. See practice exam questions**
- presbycusis, 131**
- presbyopia, 127**
- preschoolers, growth and development, 331-332**
- presentation (fetal), 312**
- preservation of forensic evidence, 372-373**
- presumptive signs of pregnancy, 300**
- preterm infants, 311**
- preterm labor, 310-311**
- prevention**
  - cancer, 143
  - Hepatitis B, 169
- primary brain injuries, 370**
- primary open-angle glaucoma (POAG), 123**
- PRK (photorefractive keratotomy), 127**
- probable signs of pregnancy, 300-301**
- prodromal stage (hepatitis), 171**
- projection, 593**
- prolactin, 210**
- prolactin inhibiting hormone (PIH), 210**
- proliferative diabetic retinopathy, 125**
- prostate cancer, 142**
- prostate specific antigen (PSA), 142, 151**
- prostatitis, 67-68**
- protamine sulfate, 37**
- proton pump inhibitors, 36**
- PSA (prostate specific antigen), 142, 151**
- PSCT (peripheral stem cell transplantation), 147-149**
- psychiatric system disorders**
  - anxiety-related disorders, 274
    - DID (dissociative identity disorder), 275
    - GAD (generalized anxiety disorder), 274
    - OCD (obsessive-compulsive disorder), 277-278
  - panic disorder, 276
  - phobic disorders, 277
  - PTSD (post-traumatic stress disorder), 275
  - somatoform disorder, 276
- diagnostic tests, 293
- emotional/behavioral disorders, 291
  - ADHD, 291
  - autistic disorder, 292
  - conduct disorder, 291
  - eating disorders, 293
  - oppositional defiant disorder, 291
- nursing skills, 273-274
- personality disorders, 278
  - Cluster A disorders, 278-279
  - Cluster B disorders, 279-280
  - Cluster C disorders, 280-281
  - management, 281
- pharmacology, 294
- practice exam questions, 295-298
- psychotic disorders, 282
  - bipolar disorders, 284-286
  - schizophrenia, 282-284
- resources, 603

- substance abuse, 286
  - alcoholism, 286-287
  - cannabis, 290
  - hallucinogens, 290
  - opiates, 289
  - sedative-hypnotics, 288-289
  - stimulants, 289
- terminology, 273

**psychological care, burn victims, 110****psychotic disorders, 282**

- bipolar disorders, 284-286
- schizophrenia, 282-284

**PTSD (post-traumatic stress disorder), 275****PTT (partial thromboplastin time), 590****pudendal block, 316****pulmonary embolus, 52-53****Purified Protein Derivative (PPD), 50****pyloric stenosis, 350****pyloromyotomy, 351**


---

## Q

**Q fever, 376**

questions. *See* practice exam questions

---

## R

**RA (rheumatoid arthritis), 195-197****raccoon eyes, 254****radial keratotomy (RK), 127****radiation injuries, 106, 378****radiation therapy, 144-145****rape trauma kit, 373****rationalization, 593****Raynaud's syndrome, 241****reaction formation, 593****readings**

- burn care, 120
- cancer, 157
- cultural influences, 403

- emergency nursing, 384
- endocrine system disorders, 227
- fluid and electrolyte balance, 103
- genitourinary system disorders, 75
- hematological system disorders, 87
- legal issues, 420
- neurological system disorders, 272
- pediatric clients, 363
- respiratory system disorders, 60
- sensory system disorders, 137

**refractive errors, 127-128****refusal of care considerations, 396-398****regional enteritis, 163-164****regression, 593****regular insulin, 221****regulation, pH, 91****regulatory laws, 407****rehabilitative phase (burn care), 115****religious beliefs, 396-398****renal cancer, 142****renal transplantation, 65****repression, 593****resources**

- acid/base balance, 599
- burn care, 120, 599
- cancer, 157
- cardiac disorders, 602
- connective tissue disorders, 601
- cultural influences, 403, 604
- electrolyte balance, 599
- emergency nursing, 384
- endocrine system disorders, 227, 601
- fluid and electrolyte balance, 103
- gastrointestinal disorders, 600
- genitourinary system disorders, 75, 598
- hematological system disorders, 87, 598
- legal issues, 420, 604
- maternal/newborn care, 603
- musculoskeletal disorders, 601



- neoplastic disorders, 600
- neurological system disorders, 272, 602
- pediatric care, 363, 603
- pharmacology, 597
- psychiatric disorders, 603
- respiratory system disorders, 60, 597
- sensory system disorders, 137, 599
- Respigam (RSV-IGIV), 349**
- respiratory acidosis, 93-94**
- respiratory alkalosis, 96-97**
- respiratory failure, 51**
  - ARDS (acute respiratory distress syndrome), 51-52
  - pulmonary embolus, 52-53
- respiratory rate, 589**
- respiratory syncytial virus (RSV), 348**
- respiratory system disorders**
  - acute infections, 47
    - influenza, 50-51
    - pleurisy, 49
    - pneumonia, 48-49
    - TB (tuberculosis), 50
  - acute respiratory failure, 51
    - ARDS (acute respiratory distress syndrome), 51-52
    - pulmonary embolus, 52-53
  - COPD (chronic obstructive pulmonary disease), 46
    - asthma, 47
    - chronic bronchitis, 46
    - emphysema, 46-47
  - diagnostic tests, 55
  - emerging infections, 53
    - Legionnaire's disease, 54-55
    - SARS (Severe Acute Respiratory Syndrome), 53-54
  - medications, 55-56
  - nursing skills, 45
  - pediatric care, 344
    - acute epiglottitis, 347-348
    - AOM (acute otitis media), 345
    - bronchiolitis, 348-349
    - cystic fibrosis, 349
    - LTB (laryngotracheobronchitis), 347
    - tonsillitis, 346-347
  - practice exam questions, 57-60
  - resources, 60
  - terminology, 45
- restraints, 412**
- retinal detachment, 126-127**
- retinal disorders, 125**
  - diabetic retinopathy, 125
  - hypertensive retinopathy, 125
  - macular degeneration, 126
  - retinal detachment, 126-127
- Rett's disorder, 292**
- Rh incompatibility, 318-319**
- rhabdomyolysis, 33**
- rheumatic fever, 352**
- rheumatoid arthritis (RA), 195-197**
- rhinorrhea, 253**
- Rhythm method (contraception), 319**
- ribavirin (Virazole), 348**
- Ricin, 377**
- right occiput anterior (ROA), 312**
- Rinne test, 132**
- riot control agents, 376**
- risk factors**
  - AOM (acute otitis media), 345
  - bladder cancer, 69
  - cancer, 141-142
  - CHD (congenital heart defects), 340
  - Clostridium difficile*, 178
  - DHD (developmental hip dysplasia), 338
  - DI (diabetes insipidus), 212
  - gallbladder disease, 176

gastroenteritis, 350  
 Hepatitis B, 169  
 increased intracranial pressure, 255  
 Legionnaire's disease, 54  
 osteoporosis, 193  
 pancreatitis, 174  
 pulmonary embolus, 52  
 SIADH (syndrome of inappropriate antidiuretic hormone), 211  
 stroke, 262  
 ulcers, 160

**RK (radial keratotomy), 127**  
**ROA (right occiput anterior), 312**  
**Romazicon (Flumazenil), 94**  
**ROME acronym, 97**  
**RSV (respiratory syncytial virus), 348**  
**RSV-IGIV (Respigam), 349**  
**Rule of Nines, 108**  
**Russian Orthodox Church, 397**

## S

**Safe Effective Care segment, 411-414**  
**safety, standard precautions, 591-592**  
**salicylate overdose, 357**  
**saline, administer drug, saline (SAS) procedure, 47**  
**salmonella, 179**  
**santero/a (healers), 388**  
**sarcoma, 140**  
**SARS (Severe Acute Respiratory Syndrome), 53-54**  
**SAS (saline, administer drug, saline) procedure, 47**  
**saw palmetto, 69**  
**schedules, drug, 39-40**  
**Schilling test, 83**  
**schizoid personality disorder, 279**  
**schizophrenia, 282-284**  
**schizotypal personality disorder, 279**

**school age children, growth and development, 332-333**

**SCIs (spinal cord injuries), 263-265**

**scoliosis, 354-355**

**second degree burns, 107**

**secondary brain injuries, 370**

**secondary glaucoma, 124**

**sedative-hypnotic abuse, 288-289**

**sedatives, 316**

**seizures**

generalized, 250-252  
 partial, 252  
 status epilepticus, 253  
 treatment, 252

**selective serotonin reuptake inhibitors (SSRIs), 285**

**sensorineural hearing loss, 131**

**sensory system**

diagnostic tests, 132  
 ear disorders, 129  
 hearing loss, 132  
 Meniere's disease, 130-131  
 otitis externa, 130  
 otitis media, 130  
 otosclerosis, 131  
 presbycusis, 131  
 traumatic injuries, 132  
 eye disorders, 122  
 intraocular disorders, 122-125  
 pharmacology, 129  
 refractive errors, 127-128  
 retinal disorders, 125-127  
 traumatic injuries, 128  
 visual tests, 129  
 nursing skills, 121-122  
 pharmacology, 133  
 practice exam questions, 134-137  
 resources, 137, 599  
 terminology, 121

- sepsis, 92
- septic abortions, 304
- serotonin syndrome, 286
- seven rights, medication administration, 21
- Severe Acute Respiratory Syndrome (SARS), 53-54
- sexual assault, 373
- shaman, 390
- SIADH (syndrome of inappropriate antidiuretic hormone), 211
- sickle cell anemia, 80
- side effects
  - angiotensin receptor blockers, 34
  - angiotensin-converting enzyme inhibitors, 23
  - anti-infectives, 25
  - anticoagulants, 37
  - anticonvulsants, 27
  - antiemetics, 28
  - antivirals, 31
  - beta adrenergic blockers, 24
  - chemotherapy, 145-146
  - cholesterol-lowering agents, 32
  - glucocorticoids, 30
  - histamine 2 antagonists, 35
  - magnesium sulfate, 306
  - proton pump inhibitors, 36
- signs and symptoms. *See* symptoms
- signs of pregnancy, 300-301
- Sikhism, 392, 397
- simple fractures, 188
- simple partial seizures, 252
- skeletal traction, 189
- skin cancer, 142
- skin lesions, 142
- skin traction, 189
- smallpox, 377
- snake venom, 374
- Snellen chart, 129
- social phobia, 277
- sodium, 97
- sodium warfarin, 590
- somatization disorder, 276
- somatiform disorder, 276
- somatotropin, 210
- southern belle syndrome, 279
- spansules, 20
- specific phobia, 277
- specimen collection, 412
- spina bifida, 339
- spina bifida cystica, 339
- spina bifida occulta, 339
- spinal accessory nerve, 259
- spinal cord injuries (SCIs), 263-265
- spinal headache, 316
- spinal narcotics, 317
- spinal shock, 264
- splitting (defense mechanism), 280
- SSRIs (selective serotonin reuptake inhibitors), 285
- St. John's Wort, 39
- stages
  - alcohol withdrawal, 286
  - Hepatitis, 171-172
  - labor, 311
  - nursing process, 8
- stair gait (crutch-walking), 201
- standard precautions, 591-592
- standard wound dressings, 115
- stapedectomy, 131
- Staphylococcus*, 179
- Staphylococcus enterotoxin B*, 377
- state boards of nursing, 406
- station (fetal presenting part), 313
- status epilepticus, 253
- statutory laws, 407
- steatorrhea, 349

sterilization (contraception)

**sterilization (contraception), 320**

**stimulant abuse, 289**

**stings, 374-375**

**stomach cancer, 142**

**strategies for testing, 9-15**

**streptokinase, 53**

**stress, defense mechanisms, 592-593**

**string sign, 163**

**strokes, 262-263**

**stump wrapping, 200**

**subacute subdural hematomas, 254**

**subarachnoid anesthesia, 316**

**subcutaneous nodules, 352**

**subdural hematomas, 254**

**sublimation, 593**

**substance abuse, 286**

alcoholism, 286-287

cannabis, 290

hallucinogens, 290

opiates, 289

sedative-hypnotics, 288-289

stimulants, 289

**suggested readings. *See* readings**

**superficial partial thickness burns, 107**

**suppression, 593**

**supratentorial surgery, 261**

**surgical management**

biliary atresia, 338

bladder cancer, 69

BPH (benign prostatic hyperplasia), 69

cancer, 143

cataracts, 123

cleft lip/palate, 334

COA (coarctation of the aorta), 342

compartment syndrome, 192

craniotomy, 260-261

EA (esophageal atresia), 335-336

gallstones, 178

GERD (gastroesophageal reflux disease), 167

glaucoma, 124

Hirschsprung disease, 337

hyperthyroidism, 215

imperforate anus, 336

Meniere's disease, 131

musculoskeletal issues, 197

amputations, 199-200

hip replacement, 197-198

total knee replacements, 198-199

otosclerosis, 131

pyloric stenosis, 350

refractive errors, 127

retinal detachment, 126

scoliosis, 355

spina bifida, 340

strokes, 262

TEF (tracheoesophageal fistula), 335-336

TOF (Tetralogy of Fallot), 343

tonsillitis, 346-347

ulcers, 162

**susto (fright sickness), 389**

**sweat test, 349**

**swimmer's ear, 130**

**swing through gait (crutch-walking), 201**

**symptoms**

absence seizures, 252

acute glomerulonephritis, 62

Addison's disease, 218

alcohol withdrawal, 286

anemia, 78-79

aspirin overdose, 357

asthma, 47

autism, 292

basilar skull fractures, 253

biliary atresia, 337

bladder cancer, 69

BPH (benign prostatic hyperplasia), 68

bronchiolitis, 348

- cannabis abuse, 290
- cataracts, 122
- Celiac disease, 351
- CHD (congenital heart defects), 341
- CHF (congestive heart failure), 341
- chronic glomerulonephritis, 63
- cirrhosis, 172
- Clostridium difficile*, 178
- COA (coarctation of the aorta), 342
- compartment syndrome, 191
- Crohn's disease, 163
- Cushing's disease, 219
- cystic fibrosis, 349
- DHD (developmental hip dysplasia), 338
- diabetes mellitus, 220
- diverticulitis, 165
- duodenal ulcers, 160
- dysreflexia, 264
- EA (esophageal atresia), 335
- emphysema, 46
- epidural hematomas, 254
- fractures, 188, 197
- galactosemia, 344
- gallbladder disease, 176
- gastric ulcers, 161
- GERD (gastroesophageal reflux disease), 166
- gout, 195
- Guillain-Barré, 265
- hallucinogen abuse, 290
- hemophilia, 81
- Hepatitis A, 168
- Hepatitis B, 169
- Hepatitis C, 170
- Hepatitis D, 171
- Hepatitis E, 171
- Hirschsprung disease, 336
- Hodgkin's lymphoma, 149-150
- hyperglycemia, 221
- hyperparathyroidism, 217
- hyperthyroidism, 214
- hypoglycemia, 222
- hypoparathyroidism, 216
- hypothyroidism, 213-214
- increased intracranial pressure, 255-256
- influenza, 50
- intra-abdominal bleeding, 372
- intussusception, 351
- KD (Kawasaki's disease), 353
- kidney stones, 66
- Legg-Calve-Perthes Disease, 355
- Legionnaire's disease, 54
- leukemia, 356
- LTB (laryngotracheobronchitis), 347
- major depression, 285
- mania, 284
- Meniere's disease, 130
- meningitis, 340
- metabolic acidosis, 92
- metabolic alkalosis, 95
- muscular dystrophies, 355
- nephrotic syndrome, 66
- opiate abuse, 289
- osteomyelitis, 192
- osteoporosis, 194
- otosclerosis, 131
- pancreatitis, 174
- peritonitis, 64
- pituitary tumors, 212
- PKU (Phenylketonuria), 343
- pleurisy, 49
- pneumonia, 48
- polycythemia vera, 82
- pregnancy, 300
- prodromal stage (hepatitis), 172
- prostatitis, 68
- PTSD, 275
- pulmonary embolus, 52
- pyloric stenosis, 350
- RA (rheumatoid arthritis), 195
- respiratory acidosis, 94

respiratory alkalosis, 96  
 retinal detachment, 126  
 rheumatic fever, 352  
 SARS (Severe Acute Respiratory Syndrome), 53-54  
 schizophrenia, 282  
 sedative-hypnotic abuse, 289  
 serotonin syndrome, 286  
 spinal injuries, 263  
 spinal shock, 264  
 stimulant abuse, 289  
 strokes, 262  
 subdural hematomas, 254  
 substance abuse, 286  
 TEF (tracheoesophageal fistula), 335  
 TOF (Tetralogy of Fallot), 342  
 tonic-clonic seizures, 250  
 tonsillitis, 346  
 ulcerative colitis, 164  
 UTIs (urinary tract infections), 67

**Synagis (Palivizumab), 349**  
**syndeham's chorea, 352**  
**syndrome of inappropriate antidiuretic hormone (SIADH), 211**  
**syngeneic transplant (bone marrow), 148**  
**synthetic thyroid hormone (synthroid), 214**  
**synthroid (synthetic thyroid hormone), 214**  
**syphilis, 308**  
**systems of measurement, 605-606**  
**systolic pressure, 230**

## T

**T-2 mycotoxins, 377**  
***talipes equinovarus* (congenital clubfoot), 339**  
**TB (tuberculosis), 50**  
**TBSA (total body surface area) measurement for burns, 108-109**

## teaching

cancer prevention, 143  
 nursing responsibilities, 413  
 radiation therapy, 145

**TEF (tracheoesophageal fistula), 335**

**temperature, 589**

**teratogenic agents, 302**

**teratologic congenital clubfoot, 339**

**terbutaline sulfate (brethine), 310**

**test plan, CAT (Computerized Adaptive Testing), 8-9**

**testicular cancer, 142**

**testing strategies, 9-15**

## tests

diagnostic. *See* diagnostic tests  
 Papanicolaou (Pap), 143  
 peak and trough levels, 26  
 prelabor, 313-314

**tet attacks, 342**

**tetracycline, 38, 49**

**Tetralogy of Fallot (TOF), 342-343**

**theophylline, 589**

**theories, legal, 410-411**

**therapeutic drug levels, 589-590**

**thermal injuries, 106**

**third degree burns, 107**

**thoracentesis, 49**

**thoracotomy, 336**

**threatened abortions, 304**

**three-point gait (crutch-walking), 201**

**thrombophlebitis, 240**

**thunderbird, 390**

**thyroid disorders, 213-215**

**thyroid stimulating hormone, 210**

**thyroid storm, 215**

**thyrotropin releasing hormone, 210**

**time considerations, cultural influences**

Arab-Americans, 394  
 Asian-Americans, 393

Hispanics/Latinos, 389  
Native Americans/Alaskan Natives, 391

**time-released drugs, 20**

**toddlers, growth and development, 330**

**TOF (Tetralogy of Fallot), 342-343**

**tonic-clonic seizures, 250-252**

**tonsillitis, 346-347**

**tonsillectomy, 346**

**topoisomerase inhibitors (chemotherapy), 145**

**TORCHS syndrome, 303**

**tort, 411**

**total knee replacements, 198-199**

**total parenteral nutrition (TPN), 146-147**

**toxicity, magnesium sulfate, 307**

**TPN (total parenteral nutrition), 146-147**

**tracheoesophageal fistula (TEF), 335**

**tracheostomy care, 413**

**traction**  
fractures, 189-191  
nursing responsibilities, 413

**trade names (drugs), 22**

**traditional healers, 388**

**transmission of disease, 591**

**transphenoidal surgery, 213**

**transplantation**  
bone marrow, 147-149  
PSCT (peripheral stem cell transplantation), 147-149  
renal, 65

**transposition of the major vessels, 341**

**transurethral prostatectomy (TURP), 69**

**trauma care, 370**  
abdominal injuries, 371-372  
chest injuries, 371  
ears, 132  
eyes, 128  
head injuries, 370-371  
preservation of forensic evidence, 372-373

**treatment**

abruptio placenta, 307  
acute glomerulonephritis, 63  
acute otitis media, 130  
Addison's disease, 218  
anemia, 79-81  
anxiety disorders, 277  
ARDS (acute respiratory distress syndrome), 51  
asthma, 47  
biliary atresia, 338  
bladder cancer, 70  
BPH (benign prostatic hyperplasia), 68  
bronchiolitis, 348  
cancer, 143  
bone marrow transplantation, 147-149  
chemotherapy, 145-146  
PSCT (peripheral stem cell transplantation), 147-149  
radiation therapy, 144-145  
TPN (total parenteral nutrition), 146-147  
cannabis abuse, 290  
Celiac disease, 351  
chronic glomerulonephritis, 64  
cirrhosis, 173  
compartment syndrome, 192  
congenital clubfoot, 339  
cord prolapse, 307  
Crohn's disease, 163  
Cushing's disease, 219  
cystic fibrosis, 349  
diabetic retinopathy, 125  
DIC (disseminated intravascular coagulation), 307  
diverticulitis, 166  
dumping syndrome, 162  
dysreflexia, 265  
epidural hematomas, 254  
fractured hip, 197  
fractures, 188-191

- galactosemia, 344
  - gallbladder disease, 177-178
  - gastroenteritis, 350
  - GERD (gastroesophageal reflux disease), 166
  - gout, 195
  - Guillain-Barré, 266
  - hallucinogen abuse, 290
  - hemophilia, 82
  - Hepatitis A, 168
  - Hepatitis B, 169
  - Hepatitis C, 170
  - Hepatitis D, 171
  - Hepatitis E, 171
  - Hodgkin's lymphoma, 150
  - hyperparathyroidism, 217
  - hyperthyroidism, 215
  - hypoparathyroidism, 217
  - hypothyroidism, 214
  - increased intracranial pressure, 257
  - influenza, 51
  - KD (Kawasaki's disease), 353
  - kidney stones, 66
  - Legg-Calve-Perthes Disease, 355
  - Legionnaire's disease, 55
  - leukemia, 357
  - LTB (laryngotracheobronchitis), 347
  - macular degeneration, 126
  - metabolic acidosis, 92-93
  - metabolic alkalosis, 96
  - muscular dystrophies, 356
  - nephrotic syndrome, 66
  - opiate abuse, 289
  - osteomyelitis, 193
  - osteoporosis, 194-195
  - otitis externa, 130
  - pancreatitis, 175
  - PKU (Phenylketonuria), 344
  - placenta previa, 307
  - pleurisy, 49
  - pneumonia, 48-49
  - polycythemia vera, 82
  - prostatitis, 68
  - pulmonary embolus, 53
  - RA (rheumatoid arthritis), 196-197
  - respiratory acidosis, 94
  - respiratory alkalosis, 97
  - rheumatic fever, 352
  - SARS (Severe Acute Respiratory Syndrome), 54
  - SCIs (spinal cord injuries), 263-264
  - scoliosis, 355
  - sedative-hypnotic abuse, 289
  - seizures, 252
  - stimulant abuse, 289
  - stings/bites, 374
  - strokes, 262
  - subdural hematomas, 254
  - TB (tuberculosis), 50
  - ulcerative colitis, 165
  - ulcers, 161-162
  - UTIs (urinary tract infections), 67
  - venomous snake bites, 374
- triage**
- disaster victims, 379
  - emergency nursing, 366
- trigeminal nerve, 258**
- Trousseau's sign, 96, 216**
- true clubfoot, 339**
- truncus arteriosus, 341**
- tubal ligation, 320**
- tuberculosis (TB), 50**
- tularemia, 376**
- tumors, pituitary disorders, 211-213**
- Turner's sign, 372**
- TURP (transurethral prostatectomy), 69**
- two-point gait (crutch-walking), 201**
- Tylenol overdose, 357**
- tympanic membrane rupture, 130**
- tyrosine, 343**



## U

---

**U.S. nursing boards, 613-627**  
**UAP (unlicensed assistive personnel), 411**  
**UDCA (ursodeoxycholic acid), 177**  
**ulcerative colitis, 164-165**  
**ulcers, 160-162**  
**ultrasonography, 303**  
**umbilical cord prolapse, 307**  
**uncompensated acidosis, 91**  
**uncompensated alkalosis, 91**  
**unintentional tort, 411**  
**unlicensed assistive personnel (UAP), 411**  
**unresponsiveness (deficit assessment), 369**  
**urinary calculi, 66-67**  
**urinary catheters, 413**  
**urinary tract infections (UTIs), 67**  
**urolithiasis, 66-67**  
**ursodeoxycholic acid (UDCA), 177**  
**UTIs (urinary tract infections), 67**

## V

---

**vaccinations**  
     Gardasil, 141  
     H. influenza B conjugate, 347  
     influenza, 51  
**vagal nerve stimulator (VNS), 253**  
**vagus nerve, 258**  
**variability (fetal monitoring), 590**  
**variable decelerations (fetal monitoring), 315**  
**vasectomy, 320**  
**vasoocclusive crisis, 80**  
**vasopressin (antidiuretic hormone), 211**  
**venomous snakes, 374**  
**ventricular fibrillation, 237**  
**ventricular septal defect, 341**  
**ventricular tachycardia, 236**

**verbal communication, cultural influences**  
     Arab-Americans, 394  
     Asian-Americans, 393  
     Hispanics/Latinos, 389  
     Native Americans/Alaskan Natives, 391  
**verbal stimuli (deficit assessment), 369**  
**vesicants, 376**  
**vestibulocochlear nerve, 258**  
**viral encephalitides, 377**  
**viral hemorrhagic fevers, 377**  
**Virazole (ribavirin), 348**  
**visual tests, 129**  
**vital signs**  
     normal ranges, 589  
     nursing responsibilities, 413  
**VNS (vagal nerve stimulator), 253**

## W

---

**walkers, 202-203**  
**warning signs, cancer, 140**  
**Weber test, 132**  
**weight control, pregnancy, 301**  
**wet macular degeneration, 126**  
**Wilm's tumor, 356**  
**witnessing informed consent, 411**  
**wound care, 413**  
**wrapping stumps (amputations), 200**

## X-Z

---

**xenografts, 115**  
  
**Z-track method, 28**