

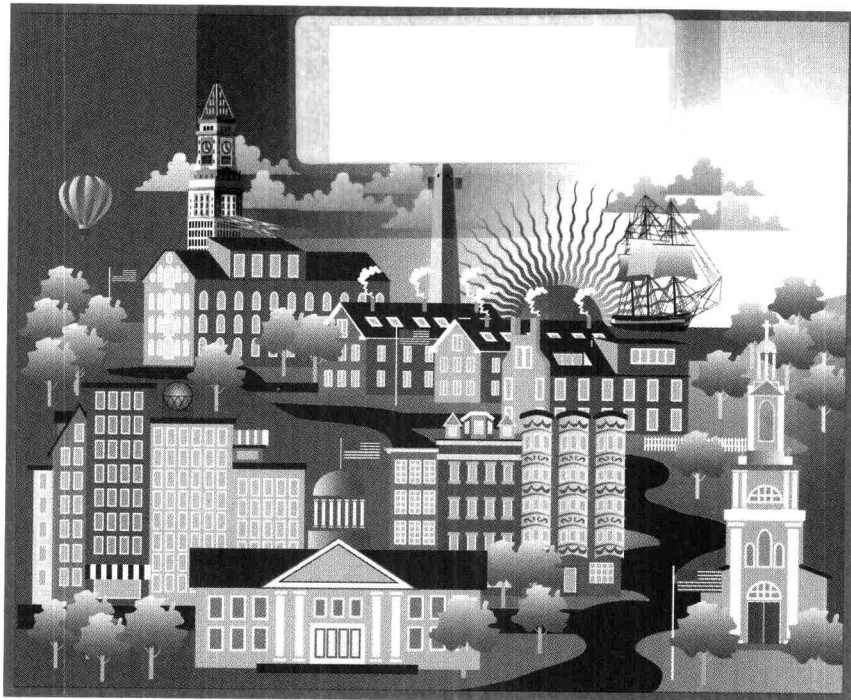
An Introduction to **Community Health**

Fourth Edition



James F. McKenzie • Robert R. Pinger • Jerome E. Kotecki

An Introduction to
Community Health
Fourth Edition



James F. McKenzie
PhD, MPH

Robert R. Pinger
PhD

Jerome E. Kotecki
HSD

BALL STATE UNIVERSITY



JONES AND BARTLETT PUBLISHERS

Sudbury, Massachusetts

BOSTON TORONTO LONDON SINGAPORE

We would like to dedicate this book to our students.

World Headquarters

Jones and Bartlett Publishers
40 Tall Pine Drive
Sudbury, MA 01776
978-443-5000
info@jbpub.com
www.jbpub.com

Jones and Bartlett Publishers Canada
2406 Nikanna Road
Mississauga, ON L5C 2W6
CANADA

Jones and Bartlett Publishers International
Barb House, Barb Mews
London W6 7PA
UK

Copyright © 2002, 1999, 1997 by Jones and Bartlett Publishers, Inc.
Previously published by HarperCollins College Publishers in 1995

All rights reserved. No part of the material protected by this copyright notice may be reproduced or utilized in any form, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without permission from the copyright owner.

Library of Congress Cataloging-in-Publication Data

McKenzie, James F., 1948–

An introduction to community health / James F. McKenzie, Robert R. Pinger,
Jerome E. Kotecki. 4th ed.

p. cm.

Includes bibliographical references and index.

ISBN 0-7637-1679-0

1. Public health United States. 2. Community health services United States.
3. Medical care United States. I. Title: Community health. II. Pinger, R. R.
- III. Kotecki, J. E. IV. Title.

RA445.M29 2002

362.1'2 dc21

2001050232

Chief Executive Officer: Clayton Jones
Chief Operating Officer: Don W. Jones, Jr.
Executive Vice President and Publisher: Robert Holland
V.P., Design and Production: Anne Spencer
V.P., Manufacturing and Inventory Control: Therese Bräuer
Editor-in-Chief, College: J. Michael Stranz
Acquisitions Editor: Laurie A. Klausner
Production Editor: Julie C. Bolduc
Editorial Assistant: Corinne Hudson
Marketing Manager: Taryn Wahlquist
Composition: D&G Limited, LLC
Printing and Binding: DB Hess Company
Cover Design: Hannus Design Associates
Cover Printing: DB Hess Company

Printed in the United States of America

05 04 03 02 10 9 8 7 6 5 4 3 2

PREFACE

For the Fourth Edition

As its title suggests, *An Introduction to Community Health* was written to introduce students to community health. It is a textbook that combines the power of today's electronic technology, via the World Wide Web, with the traditional textbook presentation. We believe that your students will find *An Introduction to Community Health* easy to read, understand, and use. If they read the chapters carefully and make an honest effort to answer the review questions and to complete some of the activities, we are confident that students will gain a good understanding of the realm of community health. *An Introduction to Community Health* incorporates a variety of pedagogical elements that assist and encourage students to understand complex community health issues. Each chapter of the book includes (1) chapter objectives, (2) a scenario, (3) an introduction, (4) content, (5) marginal definitions of key terms, (6) a chapter summary, (7) a scenario analysis and response, (8) review questions, (9) activities, (10) Web activities, and (11) references. In addition, many figures, tables, boxes, and photos have been presented to clarify and illustrate the concepts presented in the text. Selected content in each chapter is related to the *Healthy People 2010* goals and objectives. A glossary of key terms used throughout the text is also included.

Chapter Objectives

The chapter objectives identify the content and skills that should be mastered through reading the chapters, answering the end-of-chapter questions, and completing the activities. To use the objectives effectively, it is suggested that they be reviewed before and after reading the chapters. This review will help your students focus on the major points in each chapter and facilitate answering the questions and completing the activities at the end of each chapter.

Scenarios

Short scenarios are presented at the beginning of each chapter. The purpose of these scenarios is to bridge the gap between your students' personal experiences and ideas discussed within the chapter. The chapter content will enable your students to propose solutions to the community health problem posed in the scenario.

Introduction

Each chapter begins with a brief introduction that informs the reader of the topics to be presented and explains how these topics relate to others in the book.

Marginal Definitions

Key terms are introduced in each chapter of the textbook. These terms are important to the understanding of the chapter. Such terms are presented in boldface type within each chapter, and the definitions are presented in the margins (marginal definitions). Before reading the chapter, it is suggested that the student skim the chapters, paying particular attention to the key terms. This should provide greater understanding of the content. The boldfaced terms, including those defined in the margin, appear in the glossary at the end of the book. In addition, some words in the textbook have been italicized for emphasis, and are often key terms that have been defined either in another chapter or the glossary.

Content

Although each chapter in the textbook could be expanded and, indeed, there are entire books written on many of the topics we cover, we believe each chapter contains the essential material needed to introduce your students to the issues related to community health. To enhance and facilitate learning, the chapters are organized in four units: Foundations of Community Health, The Nation's Health, Health Care Delivery, and Environmental Health and Safety.

Chapter Summary

At the end of each chapter, the reader will find several bulleted points that review the major concepts contained in each chapter.

Scenario: Analysis and Response

Following the chapter summary, students are provided with an opportunity to respond to the scenario presented earlier in the chapter. The content presented in the chapter will help the students to formulate their responses or solutions.

Review Questions

The purpose of the questions at the end of each chapter is to provide the readers with feedback regarding their mastery of the chapter's content. The questions reinforce the chapter objectives and key terms.

Activities

The activities at the end of each chapter provide an opportunity for students to apply their new knowledge in a meaningful way. The activities, which are presented in a variety of formats, should appeal to the varying learning styles of your students.

Web Activities (www.jbpub.com/communityhealth)

The Web activities are presented to encourage students to further explore the chapter's content by visiting relevant community/public health Web sites. These activities recap three concepts or issues from the text in each chapter. The authors provide brief descriptions at the end of each chapter to place the Web sites in context before the students connect to the Web sites. The starting point is *Community Health on the Web*, Jones and Bartlett's own exclusive Community Health Web page (www.jbpub.com/communityhealth).

Once students have connected to the designated community health link through the Jones and Bartlett Community Health home page, they will be provided with exercise instructions for further exploration of the Web site. Animated flashcards, an interactive glossary, and interactive scenarios are also available online. When more up-to-date information becomes available at an assigned site, the authors are able to immediately edit the exercise to reflect the most recent material.

The applied end-of-chapter Web activities bring to life the theory presented in the text, thus giving students a real world context for understanding community health concepts and issues. The intent of including Web activities in the textbook is to inspire them, in real time, to authentically assess and to critically think about what they have just read in the text by asking them thought-provoking questions related to the assigned Web site. By integrating the Web into the text, we have created a dynamic learning environment that is as up-to-date as today's newspaper.

What Is New to This Edition?

Although the format of this edition is similar to the previous edition, much has changed. First, the content and statistics have been reviewed and updated with the latest information. New tables, figures, boxes, and photographs have been added. Second, because of the publication of *Healthy People 2010* in January 2000, each chapter has new boxes that reflect the content of this document. Third, the format for each chapter summary has been changed from paragraph format to bullet points, making it easier to get a quick summary. Fourth, the Web activities at the end of each chapter have been revised and updated. Instructors and students alike will find that these activities greatly expand the usefulness of the textbook. And fifth, the Ten Greatest Public Health Achievements of the twentieth century are highlighted throughout the text in the appropriate sections. Visit www.jbpub.com/communityhealth for more information about these ten greatest achievements as outlined by the Centers for Disease Control and Prevention (CDC).

Accompanying Ancillaries

This edition of *An Introduction to Community Health* is accompanied by several ancillaries including a complete lecture for each chapter in PowerPoint® and a computerized TestBank on CD-ROM. These products are available free to adopters of the text. For more information about these ancillary products, please contact the customer service department at Jones and Bartlett Publishers.

ACKNOWLEDGMENTS

A project of this nature could not be completed without the assistance and understanding of a number of individuals. First, we would like to thank all of our past and present students, who have inspired us to produce a better community health textbook. Second, we would like to thank several colleagues for their contributions. They include Dale B. Hahn, Ph.D., Department of Physiology and Health Science, Ball State University, for encouraging us to take on this project; Michael Langona, M.S. Epidemiologist, Ball Memorial Hospital, for his review of Chapters 3 and 4; Molly S. Wantz, Ed.S., Department of Physiology and Health Science, Ball State University, for her review of Chapter 6; David V. Perkins, Ph.D., Department of Psychological Sciences, Ball State University, for his review of and suggestions for Chapter 11; Diana R. Godish, Ph.D., Department of Physiology and Health Science, Ball State University, for her review of Chapters 15 and 16; Gail Dobbs, Regional Coordinator for the Governor's Commission on a Drug Free Indiana, for her aid in identifying appropriate information, and Billie Kennedy and Ruth Ann Duncan for their clerical support.

Third, we would like to express our appreciation to those professionals who took the time and effort to review and provide feedback for this edition. They include Green Waggener, College of Charleston; Kay Mueggenburg, Indiana University—Bloomington; Jim Broadbear, Illinois State University; Mariane Fahlman, Wayne State University; Janet Reis, University of Illinois—Urbana/Champaign; John Amadio, Brigham Young University; Daniel Cabrera, Northern Illinois University; Stephen Hohman, Ohio University; and Marshal Meyer, Portland Community College.

Fourth, we would like to acknowledge those professionals who reviewed the previous editions of the text. They include Amy Bernard, Department of Health Education and Promotion, University of Cincinnati; A. Davanni, California State University—Sacramento; Donald Ensley, East Carolina University; Donna Gates, College of Nursing and Health, University of Cincinnati Medical Center; Claudia S. Goggins, Department of Public Health/

Preventive Medicine, University of North Texas Health Science Center at Fort Worth; Mary Hawk, Western Washington University; Joseph Hudak, Ohio Eastern University; Marilyn Morton, State University of New York—Plattsburgh; Gay James, Health, Physical Education and Recreation Department, South West Texas State University; Carol M. Parker, University of Central Oklahoma; Jane Petrillo, Western Kentucky University; Carl Peter, Western Illinois University; Jacquie Rainey, Department of Health Sciences, University of Central Arkansas; Gayle Schmidt, Texas A & M University; J. L. Sexton, Fort Hays State University; Bob Walsh, Idaho State University; and Kathleen Welshimer, Department of Health Education and Recreation, Southern Illinois University.

Fifth, we would like to thank all of the employees of Jones and Bartlett Publishers. Their hard work and confidence in us was most helpful in creating this edition. Specifically, we would like to thank Laurie Klausner, Acquisitions Editor; Julie Bolduc, Production Editor; and Corinne Hudson, Editorial Assistant. Finally, we would like to thank our families for their support, encouragement, and tolerance of the time that writing takes away from family activities.

James F. McKenzie, PhD, MPH

Robert R. Pinger, PhD




Jerome E. Kotecki, HSD


CONTENTS



PREFACE XIX









UNIT ONE FOUNDATIONS OF COMMUNITY HEALTH 1


CHAPTER 1	COMMUNITY HEALTH—YESTERDAY, TODAY, AND TOMORROW	2
 scenario 3	Introduction	3
	Definitions 3	
	Factors That Affect the Health of a Community 5	
	A Brief History of Community and Public Health	9
	Earliest Civilizations 9	
	Middle Ages (A.D. 500–1500) 10	
	Renaissance and Exploration (A.D. 1500–1700) 11	
	The Eighteenth Century 11	
	The Nineteenth Century 12	
	The Twentieth Century 14	
	Outlook for Community Health in the Twenty-First Century	20
	World Planning for the Twenty-First Century 20	
	The United States' Planning for the Twenty-First Century 21	
	Chapter Summary	24
 Scenario: Analysis and Response		25
 COMMUNITY HEALTH ON THE WEB		25



CHAPTER 2	ORGANIZATIONS THAT HELP SHAPE COMMUNITY HEALTH	28
 scenario 29	Introduction	29
	Governmental Health Agencies	30
	International Health Agencies 30	
	National Health Agencies 31	
	State Health Agencies 37	
	Local Health Agencies 40	
	Coordinated School Health Program 42	
	Quasi-Governmental Health Organizations	44
	The American Red Cross (ARC) 44	
	Other Quasi-Governmental Organizations 45	


Nongovernmental Health Agencies	45
Voluntary Health Agencies	45
Professional Health Organizations/Associations	47
Philanthropic Foundations	48
Service, Social, and Religious Organizations	48
Corporate Involvement in Community Health	49
Chapter Summary	50
 Scenario: Analysis and Response	51
 COMMUNITY HEALTH ON THE WEB	51

CHAPTER 3	EPIDEMIOLOGY: THE STUDY OF DISEASE, INJURY, AND DEATH IN THE COMMUNITY	54
 Scenario 55	Introduction	55
	Definition of Epidemiology	56
	History of Epidemiology	57
	The Importance of Rates	58
	Incidence, Prevalence, and Attack Rates	59
	Crude and Age-Adjusted Rates	59
	Specific Rates	60
	Reporting of Births, Deaths, and Diseases	61
	Sources of Standardized Data	64
	The U.S. Census	64
	Statistical Abstract of the United States	65
	Monthly Vital Statistics Report	65
	Morbidity and Mortality Weekly Report	65
	National Health Surveys	65
	Standardized Measurements of Health Status of Populations	68
	Mortality Statistics	68
	Life Expectancy	69
	Years of Potential Life Lost	71
	Disability-Adjusted Life Years (DALYs)	72
	Disability-Adjusted Life Expectancy	72
	Epidemiological Studies	74
	Descriptive Studies	75
	Analytical Studies	77
	Experimental Studies	79
	Chapter Summary	81
	 Scenario: Analysis and Response	82
	 COMMUNITY HEALTH ON THE WEB	85

CHAPTER 4	EPIDEMIOLOGY: PREVENTION AND CONTROL OF DISEASES AND HEALTH CONDITIONS	87
	Introduction	88
	Classification of Diseases and Health Problems	88
	Communicable Versus Noncommunicable Diseases	88
	Acute Versus Chronic Diseases and Illnesses	89
	Communicable Diseases	90
	Chain of Infection	90
	Modes of Transmission	92
	Noncommunicable Diseases	93
	Diseases of the Heart and Blood Vessels	93
	Malignant Neoplasms (Cancer)	94
	Other Noncommunicable Disease Problems	95
	Prioritizing Prevention and Control Efforts	97
	Leading Causes of Death	97
	Years of Potential Life Lost	97
	Economic Cost to Society	97
	Prevention, Intervention, Control, and Eradication of Diseases	98
	Levels of Prevention	98
	Prevention of Communicable Diseases	100
	Prevention of Noncommunicable Diseases	106
	Chapter Summary	109
	Scenario: Analysis and Response	110
	COMMUNITY HEALTH ON THE WEB	110

CHAPTER 5	COMMUNITY ORGANIZING/BUILDING AND HEALTH PROMOTION PROGRAMMING	112
	Introduction	113
	Community Organizing/Building	113
	Need for Organizing Communities	114
	Assumptions of Community Organizing	114
	Community Organizing Methods	115
	The Process of Community Organizing/Building	115
	Recognizing the Problem	115
	Gaining Entry into the Community	116
	Organizing the People	117
	Assessing the Community	118
	Determining the Priorities and Setting Goals	119
	Arriving at a Solution and Selecting Intervention Activities	120
	The Final Steps in the Community Organizing/Building Process:	
	Implementing, Evaluating, Maintaining, and Looping Back	120
	A Special Note About Community Organizing/Building	121

Health Promotion Programming	121
Basic Understanding of Program Planning	121
Creating a Health Promotion Program	122
Understanding the Community and Engaging the Target Population	123
Assessing the Needs of the Target Population	123
Setting Appropriate Goals and Objectives	126
Creating an Intervention That Considers the Peuliarities of the Setting	126
Implementing the Intervention	128
Evaluating the Results	129
Chapter Summary	130
 Scenario: Analysis and Response	131
 COMMUNITY HEALTH ON THE WEB	132

CHAPTER 6	THE SCHOOL HEALTH PROGRAM: A COMPONENT OF COMMUNITY HEALTH	134
 Scenario 135	Introduction	135
	Coordinated School Health Program Defined	135
	The School Health Team	138
	The School Nurse	138
	The Teacher's Role	139
	The Need for School Health	139
	Foundations of the School Health Program	142
	School Health Policies	143
	Policy Development	144
	Policy Implementation	144
	Monitoring the Status of School Health Policy in the United States	144
	Major Components of a Coordinated School Health Program	146
	Administration and Organization	147
	School Health Services	147
	Healthy School Environment	148
	School Health Education	150
	Issues and Concerns Facing the School Health Program	154
	Coordinated School Health Program	155
	Dealing with Controversy in the Curriculum	156
	School-Based Health Centers (SBHCs) or School-Linked Health Centers (SLHCs)	157
	Violence in Schools	158
	Chapter Summary	159

 Scenario: Analysis and Response	160
--	------------



COMMUNITY HEALTH ON THE WEB	160
------------------------------------	------------



UNIT TWO	
THE NATION'S HEALTH	163

CHAPTER 7	MATERNAL, INFANT, AND CHILD HEALTH	164
------------------	---	------------



Introduction	165
---------------------	------------

Family and Reproductive Health	167
---------------------------------------	------------

Teenage Births 168

Family Planning 173

Maternal Health	179
------------------------	------------

Prenatal Health Care 180

Infant Health	181
----------------------	------------

Infant Mortality 182

Improving Infant Health 185

Child Health	188
---------------------	------------

Childhood Mortality 189

Childhood Morbidity 190

Community Programs for Women, Infants, and Children	196
--	------------

Maternal and Child Health Bureau 197

Women, Infants, and Children Program (WIC Program) 199

Providing Health Insurance and Health Care for Women,

Infants, and Children 200

Providing Child Care 201

Other Advocates for Children 202

Chapter Summary	203
------------------------	------------

 Scenario: Analysis and Response	204
--	------------



COMMUNITY HEALTH ON THE WEB	205
------------------------------------	------------

CHAPTER 8	ADOLESCENTS, YOUNG ADULTS, AND ADULTS	207
------------------	--	------------



Introduction	208
---------------------	------------

Adolescents and Young Adults	208
-------------------------------------	------------

Demography 209

A Health Profile 211

Community Health Strategies for Improving the Health of

Adolescents and Young Adults 222

Adults 223

- A Health Profile 223
- Community Health Strategies for Improving the Health of Adults 229

Chapter Summary 230

Scenario: Analysis and Response 230



COMMUNITY HEALTH ON THE WEB 231

CHAPTER 9 ELDERLY 233



Introduction 234

- Definitions 234

Myths Surrounding Aging 236

Demography of Aging 237

- Size and Growth of the Elder Population 237
- Factors That Affect Population Size and Age 238
- Support and Labor-Force Ratios 240
- Other Demographic Variables of the Aging 242

A Health Profile of Elders 245

- Mortality 245
- Morbidity 246
- Health Behaviors and Lifestyle Choices 248
- Elder Abuse and Neglect 249

Instrumental Needs of Elders 250

- Income 250
- Housing 250
- Personal Care 253
- Health Care 255
- Transportation 257
- Community Facilities and Services 257

Chapter Summary 260

Scenario: Analysis and Response 261



COMMUNITY HEALTH ON THE WEB 262

CHAPTER 10 COMMUNITY HEALTH AND MINORITIES 264





Introduction 265


Racial and Ethnic Classifications 270

Health Data Sources and Their Limitations 272

Black Americans 273

Americans of Hispanic Origin 276

Asian Americans and Pacific Islanders	276
Native Americans and Alaska Natives	278
U.S. Government, Native Americans, and the Provision of Health Care	279
Indian Health Service (IHS)	280
Refugees: The New Immigrants	281
Race and Health Initiative	282
Infant Mortality	282
Cancer Screening and Management	283
Cardiovascular Diseases	284
Diabetes	285
HIV Infection/AIDS	287
Child and Adult Immunization Rates	290
Socioeconomic Status and Racial and Ethnic Disparities in Health	293
Equity in Minority Health	297
Cultural Competence	297
Empowering the Self and the Community	301
Chapter Summary	305
 Scenario: Analysis and Response	306
 COMMUNITY HEALTH ON THE WEB	306

CHAPTER 11	COMMUNITY MENTAL HEALTH	309
 Scenario	310	
	Introduction	310
	Definitions	311
	Classification of Mental Disorders	312
	Origins and Causes of Mental Disorders	312
	Mental Illness in America	313
	Statistical Indicators of Mental Illness	313
	Social Indicators of Mental Illness	314
	Stress: A Contemporary Mental Health Problem	315
	History of Mental Health Care in America	319
	Mental Health Care before World War II	319
	Mental Health Care after World War II	323
	Mental Health Care in America Today	328
	The Problem of Homelessness	328
	Meeting the Needs of the Mentally Ill: Prevention and Treatment	331
	Federal Initiatives for Mental Health Care	334
	Community Mental Health and Managed Care	335
	Chapter Summary	336

 Scenario: Analysis and Response	337
--	------------

 COMMUNITY HEALTH ON THE WEB	338
--	------------

CHAPTER 12 ALCOHOL, TOBACCO, AND OTHER DRUGS: A COMMUNITY CONCERN	341
--	------------

 Introduction	342
---	------------

Scope of the Current Drug Problem in the United States	343
Definitions	345

Factors That Contribute to Alcohol, Tobacco, and Other Drug Abuse	346
--	------------

Inherited Risk Factors	347
Environmental Risk Factors	347

Types of Drugs Abused and Resulting Problems	349
---	------------

Legal Drugs	349
Controlled Substances and Illicit (Illegal) Drugs	354

Prevention and Control of Drug Abuse	361
---	------------

Levels of Prevention	362
Elements of Prevention	362
Governmental Drug Prevention and Control Agencies and Programs	363
Nongovernmental Drug Prevention and Control Agencies and Programs	367

Chapter Summary	371
------------------------	------------

 Scenario: Analysis and Response	372
--	------------

 COMMUNITY HEALTH ON THE WEB	373
--	------------



UNIT THREE HEALTH CARE DELIVERY	377
--	------------

CHAPTER 13 HEALTH CARE SYSTEM: STRUCTURE	378
---	------------

 Introduction	379
---	------------

A Brief History of Health Care Delivery in the United States	379
---	------------

The Spectrum of Health Care Delivery	387
---	------------

Public (or Population-Based) Health Practice	388
Medical Practice	389
Long-Term Practice	390

Types of Health Care Providers	391
---------------------------------------	------------

Independent Providers	392
-----------------------	-----

Limited (or Restricted) Care Providers 397

Nurses 397

Allied Health Care Professionals 400

Public Health Professionals 401

Health Care Facilities and Their Accreditation 402

Health Care Facilities 402

Accreditation of Health Care Facilities 406

Chapter Summary 406

Scenario: Analysis and Response 407



COMMUNITY HEALTH ON THE WEB 408

CHAPTER 14 HEALTH CARE SYSTEM: FUNCTION 410

Introduction 411



Gaining Access to and Paying for Health Care in the United States 411

Access to Health Care 411

Paying for Health Care 412

Third-Party Payment 414

Health Insurance 416

The Health Insurance Policy 419

Types of Health Insurance Coverage 420

The Cost of Health Insurance 421

Self-Insured Organizations 422

Health Insurance Provided by the Government 422

Medicare 422

Medicaid 424

Supplemental Health Insurance 425

Medigap 425

Other Supplemental Insurance 425

Long-Term Care Insurance 425

Managed Care 427

Types of Managed Care 428

Advantages and Disadvantages of Managed Care 431

Other Arrangements for Delivering Health Care 431

National Health Insurance 431

Canadian Health Care System 432

The Oregon Health Plan 435

Chapter Summary 437




Scenario: Analysis and Response 438



COMMUNITY HEALTH ON THE WEB 439



UNIT FOUR ENVIRONMENTAL HEALTH AND SAFETY 441

CHAPTER 15	ENVIRONMENTAL CONCERNS: WASTES AND POLLUTION	442
	Introduction	443
	Natural Environmental Hazards	443
	Residues and Wastes from Human Activities	444
	Types of Wastes and Pollution	446
	Solid Waste 446	
	Hazardous Waste 453	
	Air Pollution 456	
	Water and Its Pollution 465	
	Radiation 473	
	Noise Pollution 476	
	Chapter Summary	478
	 Scenario: Analysis and Response	479
	COMMUNITY HEALTH ON THE WEB	480

CHAPTER 16	THE IMPACT OF ENVIRONMENT ON HUMAN HEALTH	482
	Introduction	483
	Biological Hazards and Human Health	484
	Waterborne Diseases 485	
	Foodborne Diseases 486	
	Vectorborne Diseases 490	
	Chemical Hazards and Human Health	492
	Pesticides 492	
	Environmental Tobacco Smoke 494	
	Lead 496	
	Physical Hazards and Human Health	500
	Radon Contamination 500	
	Ultraviolet (UV) Radiation 501	
	Psychological Hazards and Human Health	503
	Sociological Hazards and Human Health	504
	Population Growth 504	
	Site and Location Hazards and Human Health	508
	Natural Disasters 509	
	Chapter Summary	511