COTTRELL GIRVAN SEABERT SPEAR McKENZIE

Principles and Foundations of Health Promotion and Education

7th Edition

Pearson

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SEVENTH EDITION

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FOREWORD

This is an exciting time to be studying and/or entering the field of health education/promotion. There continues to be unparalleled interest in health as evidenced by the growing numbers of students entering training programs, numerous new products and services designed to address health issues, and the dramatic growth in information and information-seeking behaviors of those interested in knowing about their health. Yet we are facing problems that are dramatic with the aging of the population, the shifting demographics of populations, the continuing challenges that come from new biological and social threats to health, and the explosive growth of social media and apps that are related to health issues. In Burke's preface to the second edition of *Connections*, he refers to "the radical changes that lay ahead, caused by developments in communications and information technology, and of the urgent need to understand the process of scientific and technological change, the better to manage its increasingly unexpected ripple effects" (Burke, 2007).

Therein lies the challenge to crafting a book to serve as the foundational introduction to the field of health education/promotion. Most would agree that change is the only constant in our world today—and that change is happening more rapidly and with greater consequence with each passing year. How then do Cottrell et al. provide a foundation for a profession as complex and changing as health education/promotion? Let me give you two illustrations of that challenge. First, in my lifetime there have been incredible changes in our thinking about subjects such as nutrition. In that time we've gone from a basic seven, to a basic four, to a daily food guide with five groups, then a food wheel providing a platter for daily food choices, then a food guide pyramid followed by MyPyramid, and now MyPlate (U.S. Department of Agriculture, 2013). Certainly, nutrition is not the only health-related content that changes so rapidly with changes in science and technology.

Second, as I look back one decade to 2006, no one then knew what the Zika virus was, Facebook and Twitter had barely come into use, the Human Genome Project had just been completed, iPhones and iPads had not yet been introduced, and this country had not yet had an African American president. Think about the implications of this kind of rapid change in the field of health education/promotion. Those responsible for the training of health education specialists/ promoters must train our students to be able to practice 10 years from now, in a world that does not yet exist, to address problems that are as yet unknown and to be able to use tools that do not yet exist.

The best definition of education I've ever heard has been attributed to Albert Einstein, but its origin is unclear. However, I believe that "education is what's left over after you forget

everything you've been taught." If you agree, you realize that we need to put into place not content related to fields of study such as health education/promotion, but the building blocks that let aspiring professionals and others continue to grow in their understanding and professional practice. Cottrell and colleagues come as close as I've seen among the "foundations" books to achieving this.

Here's what the seventh edition of *Principles and Foundations of Health Promotion and Education* does to address the theme of change. The authors provide foundational history and philosophical guidelines allowing for consideration, thought, application, and adaptation. They don't prescribe, they provide building blocks. They do this in the context of applying multiple pedagogies in their chapters. I am particularly appreciative of their Practitioner's Perspective, A Day in the Career, Case Studies, and Critical Thinking Questions and Activities. These worked so well in the sixth edition and have been significantly updated and improved.

I am especially pleased to say that consistent with the theme of change, Chapter 10 on future trends in health education/promotion captures the essence of the forces driving these changes, and it is an interesting look at the implications for the profession and practice of health education/promotion. Because of the overall tenor of the book and each of the elements I've discussed, it is critically important that a book such as this is available to those beginning their study of the field of health education/promotion.

Welcome to the future.

Robert S. Gold, Ph.D, DrPH, FASHA, FAAHB
University of Maryland

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PREFACE

Many students enter the profession of health education/promotion knowing only that they are interested in health and wish to help others improve their health status. Typically, students' interest in health education/promotion is derived from their own desire to live a healthy lifestyle and not from an in-depth understanding of the historical, theoretical, and philosophical foundations of this profession. Other than perhaps a high school health education teacher, many students do not know any health education specialists. In fact, most beginning students are unaware of employment opportunities, the skills needed to practice health education/promotion, and what it would be like to work in a given health education/promotion setting.

This text is written for such students. The contents will be of value to students who are undecided as to whether health education/promotion is the major they want to pursue, as well as for new health education/promotion majors who need information about what health education/promotion is and where health education specialists can be employed. The text is designed for use in an entry-level health education/promotion course in which the major goal is to introduce students to health education/promotion. In addition, it may have value in introducing new health education graduate students, who have undergraduate degrees in fields other than health education/promotion, to the health education/promotion profession.

New to the Seventh Edition

- Significant rewrites to make information in the chapters flow better in sequence for students.
- All chapters have been updated for currency including tables, figures, references, terminology, end-of-chapter materials, Weblinks, and appendices.
- Additional within-chapter application scenarios.
- Many of the Practitioner's Perspective boxes have been replaced, offering fresh insights from current practitioners addressing such areas as health education certification (CHES), Eta Sigma Gamma, professional associations, internships, and careers in healthcare settings and university wellness centers among others.

Important new issues and trends covered include

- the impact of healthcare reform on health education/promotion;
- Whole School, Whole Community, Whole Child Model;

- Health Education Specialist Practice Analysis 2015 (HESPA);
- *Healthy People 2020*;
- updated responsibilities, competencies, and sub-competencies of a health education specialist;
- program accreditation for freestanding undergraduate public/community health programs; and
- The Patient Protection and Affordable Care Act's implications for public/community health education.

Chapter Overview

Chapter 1, "A Background for the Profession," provides an overview of health education/promotion and sets the stage for the remaining chapters. Chapter 2, "The History of Health and Health Education/Promotion," examines the history of health and health care, as well as the history of health education/promotion. This chapter was written to help students understand the tremendous advances that have been made in keeping people healthy, and it provides perspective on the role of health education/promotion in that effort. One cannot appreciate the present without understanding the past. The chapter will bring students up to date with the most recent happenings in the profession, such as the new Patient Protection and Affordable Care Act and the Whole School, Whole Community, Whole Child Model. Chapters 3, 4, and 5 provide what might best be called the basic foundations. All professions, such as law, medicine, business, and teacher education, must provide students with information related to the philosophy, theory, and ethics inherent in the field.

Chapter 6, "The Health Education Specialist: Roles, Responsibilities, Certifications, and Advanced Study," is designed to acquaint new students with the skills that are needed to practice in the field of health education/promotion. It also explains the certification process to students and encourages them to begin thinking of graduate study early in their undergraduate programs. New information related to changes in the competencies and sub-competencies of a health education specialist based on the 2015 Health Education Specialist Practice Analysis (HESPA) study is incorporated into this chapter. Chapter 7, "The Settings for Health Education/Promotion," introduces students to the job responsibilities inherent in different types of health education/promotion positions and provides a discussion of the pros and cons of working in various health education/promotion settings. With its "A Day in the Career of . . ." sections and the "Practitioner's Perspective" boxes, this chapter is unique among introductory texts. An important warning is provided to students to be careful what they post to social networking Web sites, and information is included on landing one's first job and how to excel in a health education/promotion career. This chapter truly provides students with important insights into the various health education/promotion settings and the overall practice of health education/promotion.

Chapter 8, "Agencies, Associations, and Organizations Associated with Health Education/Promotion," introduces students to the many professional agencies, associations, and organizations that support health education/promotion. This is an extremely important chapter because all health education specialists need to know of these resources and allies. All introductory students are encouraged to join one or more of the professional associations

described in this chapter. For that reason, contact information for all of the professional associations discussed is included in the chapter. Chapter 9, "The Literature of Health Education/Promotion," directs students to the information and resources necessary to work in the field. Included in this chapter is basic information related to the Internet and the World Wide Web that should be especially helpful to new students. With the explosion of knowledge related to health, being able to locate needed resources is a critical skill for health education specialists. Finally, health education/promotion students need to consider what future changes in health knowledge, policy, and funding may mean to those working in health education/promotion. They must learn to project into the future and prepare themselves to meet these challenges. Chapter 10, "Future Trends in Health Education/Promotion," is an attempt to provide a window into the future for today's health education/promotion students.

As one reads the text, it will be apparent that certain standard features exist in all chapters. These are designed to help the student identify important information, guide the student's learning, and extend the student's understanding beyond the basic content information. Each chapter begins by identifying objectives. Before reading a chapter, students should carefully read the objectives because they will guide the student's learning of the information contained in that chapter. After reading a chapter, it may also be helpful to review the objectives again to be certain major points were understood. Being able to respond to each objective and define each highlighted term in a chapter is typically of great value in understanding the material and preparing for examinations.

Throughout the text take note of the "Practitioner's Perspective" boxes. These are boxes written by health education/promotion professionals who are currently working in the field. Some of the boxes relate to working in a particular setting, while others focus on such areas as ethics, certification, internships, hiring, Eta Sigma Gamma, and graduate study. There is a total of 18 "Practitioner's Perspective" boxes, 9 of them new to this edition.

At the end of each chapter, the student will find a brief summary of the information contained in that chapter. Following the summary are review questions. Students are encouraged to answer these questions because they provide an additional method for targeting learning and reviewing the chapter's contents. A case study follows the review questions. Case studies allow readers to project themselves into realistic health education situations and problem solve how to handle such situations. Next, readers will find critical thinking questions designed to extend readers' learning beyond what is presented in the chapter. They require readers to apply what they have learned, contemplate major events, and project their learning into the future. A list of activities, designed to extend readers' knowledge beyond what can be obtained by reading the chapter, follows the critical thinking questions. In some activities students are asked to apply or synthesize the chapter's information. In others, students are encouraged to get actively involved with experiences that will help integrate learning from the text with a practical, real-world setting. By completing these activities, students should have a better understanding of health education/promotion. The activities are followed by Weblinks, which have been updated and expanded for this edition. Weblinks are sites that students can access to read more about a topic, extend their learning, or obtain interesting and important resource materials. Each chapter ends with a list of references the authors used to develop the chapter. All references are cited in the chapter, and students can use the references to obtain more detailed information on a topic from an original source when they desire to do so.

Supplements

The following instructor supplements are available with the seventh edition:

- An Instructor's Manual that includes a synopsis, an outline, teaching ideas, Web site activities, and video resources for each chapter.
- A Test Bank that includes multiple-choice, true/false, and essay questions for each chapter. A computerized Test Bank is also available.
- PowerPoint presentations that feature chapter outlines and key points from the text.

Many thanks to Michelle LaClair, Pennsylvania State College of Medicine, for her careful revision of these resources. All of the supplements are available in electronic format only; they can be downloaded by signing in at Pearson's Instructor Resource Center at http://www.pearsonhighered.com/educator.

We authors readily acknowledge that the information contained in this text represents our bias regarding what material should be taught in an introductory course. There may be important introductory information we have not included, or we may have included information that may not be considered introductory by all users. We welcome and encourage comments and feedback, both positive and negative, from all users of this text. Only with such feedback can we make improvements and include the most appropriate information in future editions.

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Chapter 1

A Background for the Profession

Chapter Objectives

After reading this chapter and answering the questions at the end, you should be able to:

- Define the terms *health, health education, health promotion, disease prevention, public health, community health, global health, population health,* and *wellness*.
- Describe the current status of health education/promotion.
- Define *epidemiology*.
- Explain the means by which health or health status can be measured.
- List and explain the goals and objectives of health education/promotion.
- Identify the practice of health education/promotion.
- Explain the following concepts and principles:
  a. health field concept
  b. levels of prevention
  c. risk factors
  d. health risk reduction
  e. chain of infection
  f. communicable disease model
  g. multicausation disease model
  h. selected principles of health education/promotion—*participation, empowerment, advocacy, social media*, and *cultural competence*

Health education/promotion has come a long way since its early beginnings. Health education/promotion as we know it today dates back only about 80 years, but the progress in development has accelerated most rapidly in the past 35 years (Glanz & Rimer, 2008). As the profession has grown and changed, so have the roles and responsibilities of health education specialists. The purpose of this book is to provide those new to this profession with a sense of the past—how the profession was born and on what principles it was developed; a complete understanding of the present—what it is that health education specialists are expected to do, how they should do it, and what guides their work; and a look at the future—where the profession is headed, and how health education specialists can keep pace with the changes to be responsive to those whom they serve.

This chapter provides a background in the terminology, concepts, and principles of the profession. It defines many of the key words and terms used in the profession, briefly discusses why health education/promotion is referred to as an emerging profession, looks at the current state of the profession, shows how health and health status have been measured, outlines the goals and objectives of the profession, identifies the practice of health education/promotion, and discusses some of the basic, underlying concepts and principles of the profession.

Key Words, Terms, and Definitions

Each chapter introduces new terminology that is either important to the specific content presented in the chapter or used frequently in the profession. This chapter discusses the more common terms that will be used throughout this text. Like the profession, these words and definitions have evolved over the years. The most recent effort occurred in 2011 (Joint Committee on Health Education and Promotion Terminology [Joint Committee], 2012). The 2011 Joint Committee was convened by the American Association for Health Education (AAHE) of the American Alliance for Health, Physical Education, Recreation, and Dance (AAHPERD) (see Chapter 8 for information on professional associations). The Joint Committee is charged with reviewing and updating the terminology of the profession. The members of the 2011 Joint Committee were composed of representatives from the member organizations in the Coalition of National Health Education Organizations (see Chapter 8), the National Commission for Health Education Credentialing, Inc. (see Chapter 6), and governmental agencies (Joint Committee, 2012). Before this meeting, there had been seven major terminology reports developed for the profession over the past 80 years with the first dating back to 1927 (Johns, 1973; Joint Committee on Health Education Terminology, 1991a, 1991b; Joint Committee, 2001; Moss, 1950; Rugen, 1972; Williams, 1934; Yoho, 1962).

Before presenting some of the key terms used in the profession, an in-depth discussion of the word *health* may be helpful. Health is a difficult concept to put into words, but it is one that most people intuitively understand. The World Health Organization (WHO) has defined health as "the state of complete mental, physical and social well being not merely the absence of disease or infirmity" (WHO, 1947, p. 1). This classic definition is important because it identifies the vital components of health and further implies that health is a holistic concept involving an interaction and interdependence among these various components. A number of years after the writing of the WHO definition, Hanlon (1974) defined health as "a functional state which makes possible the achievement of other goals and activities. Comfort, well-being, and the distinction between physical and mental health differ in social classes, cultures, and religious groups" (p. 73). And more recently, the WHO (1986) has stated that "To reach a state of complete physical, mental, and social well-being, an individual or group must be able to identify and to realize aspirations, to satisfy needs, and to change or cope with the environment. Health is, therefore, seen as a resource for everyday life, not the object of living. Health is a positive concept emphasizing social and personal resources, as well as physical capacities" (p. 5). In other words, good health should not be the goal of life but rather a vehicle to reaching one's goals of life. We feel that these major concepts of health are captured in the definition that states that **health** "is a *dynamic* state or condition that is multidimensional (i.e., physical, emotional, social, intellectual, spiritual, and occupational) a resource for living, and results from a person's interactions with and adaptation to the environment"

(Joint Committee, 2012, p. 10). As such, health can exist in varying degrees—ranging from good to poor and everywhere in between—and depends on each person's individual circumstances. "For example, a person can be healthy while dying, or a person who is quadriplegic can be healthy in the sense that his or her mental and social well-being is high and physical health is as good as it can be" (Hancock & Minkler, 2005, p. 144).

In addition to the word *health*, it is also important to have an understanding of the following key terms and definitions:

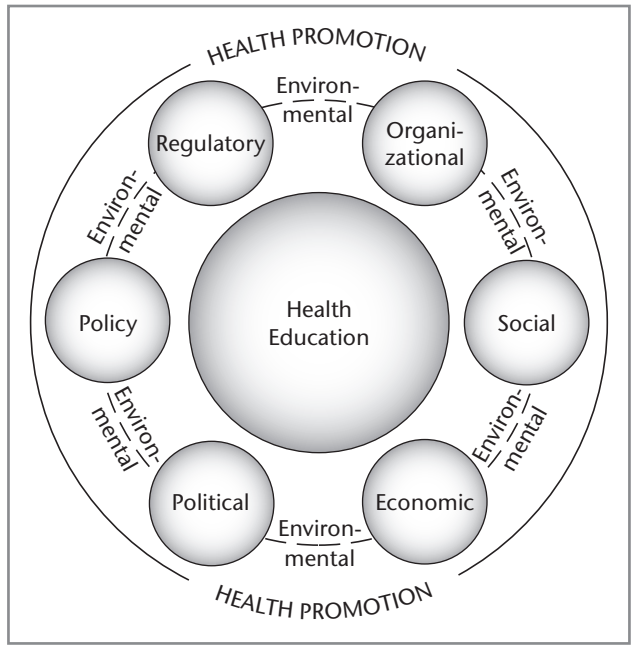
community health—"the health status of a defined group of people and the actions and conditions to promote, protect and preserve their health" (Joint Committee, 2012, p. 15)

health education—"any combination of planned learning experiences using evidence based practices and/or sound theories that provide the opportunity to acquire knowledge, attitudes, and skills needed [to] adopt and maintain healthy behaviors" (Joint Committee, 2012, p. 17)

health promotion—"any planned combination of educational, political, environmental, regulatory, or organizational mechanisms that support actions and conditions of living conducive to the health of individuals, groups, and communities" (Joint Committee, 2012, p. 18) (See **Figure 1.1** for the relationship between health education and health promotion.)

disease prevention—"the process of reducing risks and alleviating disease to promote, preserve, and restore health and minimize suffering and distress" (Joint Committee, 2001, p. 99)

public health—"an organized effort by society, primarily through its public institutions, to improve, promote, protect and restore the health of the population through collective action. It includes services such as health situation analysis, health surveillance, health promotion, prevention, infectious disease control, environmental protection and sanitation, disaster and health emergency preparedness and response, and occupational health, among others" (WHO, 2016a)



▶ **Figure 1.1** Relationship between health education and health promotion

Source: From J. F. McKenzie, B. L. Neiger, and R. Thackeray, *Planning, Implementing and Evaluating Health Promotion Programs: A Primer*. 6th ed., p. 5, Fig 1.1 © 2013 Reproduced by permission of Pearson Education, Inc., Upper Saddle River, NJ.

global health—"health problems, issues, and concerns that transcend national boundaries and are beyond the control of individual nations, and are best addressed by cooperative actions and solutions" (Joint Committee, 2012, p. 17)

population health—"a cohesive, integrated, and comprehensive approach to health care that considers the distribution of health outcomes within a population, the health determinants that influence distribution of care, and the policies and interventions that affect and are affected by the determinants" (Nash, Fabius, Skoufalos, Clarke, & Horowitz, 2016, p. 448)

wellness—"an approach to health that focuses on balancing the many aspects, or dimensions, of a person's life through increasing the adoption of health enhancing conditions and behaviors rather than attempting to minimize conditions of illness" (Joint Committee, 2012, p. 10)

Before we leave the discussion about key words and terms of the profession, it should be noted that there is not complete agreement on terminology. We could easily have found another definition for each of the terms presented here written by either a respected scholar in health education/promotion or a legitimate professional or governmental health agency.

The Health Education/Promotion Profession

Historically, there have been a number of occasions that can be pointed to as "critical" to the development of health education/promotion. (See Chapter 2 for an in-depth presentation of the history.) But there has been no time in which the status of the profession has been more visible to the average person or as widely accepted by other health professionals as it is today. Much of this notoriety can be attributed to the health promotion era of public health history that began about 1974 in the United States.

The United States' first public health revolution spanned the late 19th century through the mid-20th century and was aimed at controlling the harm (morbidity and mortality) that came from infectious diseases. By the mid-1950s, many of the infectious diseases in the United States were pretty much under control. This was evidenced by the improved infant mortality rates, the reduction in the number of children who were contracting childhood diseases, the reduction in the overall death rates in the country, and the increase in life expectancy (see **Table 1.1**). With the control of many communicable diseases, the focus moved to the major chronic diseases such as heart disease, cancer, and strokes—diseases that were, in large part, the result of the way people lived.

It became clear, by the mid-1970s, that the greatest potential for reducing morbidity, saving lives, and reducing healthcare costs in the United States was to be achieved through health promotion and disease prevention. At the core of this approach was health education/promotion. In 1980, the U.S. Department of Health, Education, and Welfare (USDHEW) presented a blueprint of the health promotion and disease prevention strategy in its first set of health objectives in the document called *Promoting Health/Preventing Disease: Objectives for a Nation* (USDHEW, 1980). This document proposed a total of 226 objectives divided into three main areas—preventive services, health protection, and health promotion. This was the first time a comprehensive national agenda for prevention had been developed, with specific goals and objectives for anticipated gains (McGinnis, 1985). In 1985, it was apparent that only about one half of the objectives established in 1980 would be reached by 1990, another

TABLE 1.1 **Life expectancy at birth, at 65 years of age, and at 75 years of age, according to sex: United States, selected years 1900–2010**

	At Birth			At 65 Years			At 75 Years		
Year	**Both Sexes**	**Male**	**Female**	**Both Sexes**	**Male**	**Female**	**Both Sexes**	**Male**	**Female**
1900	47.3	46.3	48.3	11.9	11.5	12.2	*	*	*
1950	68.2	65.6	71.1	13.9	12.8	15.0	*	*	*
1980	73.7	70.7	77.4	16.4	14.1	18.3	10.4	8.8	11.5
2010	78.7	76.2	81.0	19.1	17.7	20.3	12.1	11.0	12.9

* = Data not available

Source: Data from U.S. Department of Health and Human Services, National Center for Health Statistics (NCHS). (2015). *Health, United States, 2014: With Special Feature on Adults Aged 55-64.* Hyattsville, MD: Author

one fourth would not be reached, and progress on the others could not be judged because of the lack of data (Mason & McGinnis, 1990). Even though not all objectives were reached, the planning process involved in the 1980 report demonstrated the value of setting goals and listing specific objectives as a means of measuring progress in the nation's health and healthcare services. These goals and objectives published by the U.S. Department of Health and Human Services (USDHHS), now in their fourth generation as *Healthy People 2020*, have defined the nation's health agenda and guided its health policy since their inception. (See Chapter 2 for more on *Healthy People 2020*.)

Now more than 10 years into the 21st century, the health of the people in the United States is better than any time in the past. "By every measure, we are healthier, live longer, and enjoy lives that are less likely to be marked by injuries, ill health, or premature death" (Institute of Medicine [IOM], 2003, p. 2). Yet, we could do better. Four modifiable health risk behaviors—"lack of exercise or physical activity, poor nutrition, tobacco use, and drinking too much alcohol—cause much of the illness, suffering, and early death related to chronic diseases and conditions" (Centers for Disease Control and Prevention [CDC], 2016a, ¶2). Thus, "behavior patterns represent the single most prominent domain of influence over health prospects in the United States" (McGinnis, Williams-Russo, & Knickman, 2002, p. 82).

As the health agenda has become more clearly defined, so has the health education/promotion profession. In 1998, the U.S. Department of Commerce and Labor formally recognized "health educator" as a distinct occupation, thus demonstrating that the health education/promotion profession is moving in the right direction. More recently a study titled "Marketing the Health Education Profession: Knowledge, Attitudes, and Hiring Practices of Employers" conducted by Hezel Associates (2007) was conducted. Through this study the term *health education specialist* has gained favor over the use of the term *health educator*. A **health education specialist** has been defined as "an individual who has met, at a minimum, baccalaureate-level required health education academic preparation qualifications, who serves in a variety of settings, and is able to use appropriate educational strategies and methods to facilitate the development of policies, procedures, interventions, and systems conducive to the health of individuals, groups, and communities" (Joint Committee, 2012, p. 18). Thus the term *health education specialist* will be used throughout the remainder of this book.

Clearly, there is a need for health education/promotion interventions provided by health education specialists in the United States both today and in the future.

Measuring Health or Health Status

Though the definition of health is easy to state, trying to quantify the amount of health an individual or a population possesses is not easy. Most measures of health are expressed using health statistics based on the traditional medical model of describing ill health (injury, disease, and death) instead of well health. Thus, the higher the presence of injury, disease, and death indicators, the lower the level of health; the lower the presence of injury, disease, and death indicators, the higher the level of health. Out of necessity we have defined the level of health with just the opposite—ill health (McKenzie, Pinger, & Kotecki, 2012).

The information gathered when measuring health is referred to as **epidemiological data**. These data are gathered at the local, state, and national levels to assist with the prevention of disease outbreaks or control those in progress and to plan and assess health education/promotion programs. Epidemiology is one of those disciplines that helps provide the foundation for the health education/promotion profession. **Epidemiology** is defined as "the study of the distribution and determinants of health-related states or events (including disease), and the application of this study to the control of diseases and other health problems" (World Health Organization, 2016b). In the following sections, several of the more common epidemiological means by which health, or lack thereof, are described and quantified.

Rates

A **rate** "is a measure of some event, disease, or condition in relation to a unit of population, along with some specification of time" (National Center for Health Statistics [NCHS], 2015, p. 442). Rates are important because they provide an opportunity for comparison of events, diseases, or conditions that occur at different times or places. Some of the more commonly used rates are death rates, birth rates, and morbidity rates. **Death rates** (the number of deaths per 100,000 resident population), sometimes referred to as *mortality* or *fatality rates*, are probably the most frequently used means of quantifying the seriousness of injury or disease. (See **Table 1.2** for death rates and **Table 1.3** for an example of a formula used to tabulate rates.) "The transition from wellness to ill health is often gradual and poorly defined. Because death, in

TABLE 1.2 **Crude death rates for all causes and selected causes of death: United States, 2014**

Cause	Deaths per 100,000 Population
All causes	823.7
Diseases of the heart	192.7
Malignant neoplasms (cancer)	185.6
Cerebrovascular diseases (stroke)	41.7
Suicide	13.4
Motor vehicle-related injuries	11.1
Homicide	5.0

Source: Data from U.S. Department of Health and Human Services, National Center for Health Statistics (NCHS). (2015). *Health, United States, 2014: With Special Feature on Adults Aged 55-64.* Hyattsville, MD: Author.

BOX 1.1

Practitioner's Perspective

EPIDEMIOLOGY Jaime Harding

CURRENT POSITION: Health Promotion Program Manager

EMPLOYER: Central District Health Department, Boise, Idaho

DEGREE/INSTITUTION/YEAR: Master of Health Science, Boise State University, August 2006; Bachelor of Science, Athletic Training and Bachelor of Science, Health Promotion, Boise State University, May 2001.

MAJOR: Health Science—Health Policy emphasis (graduate); Athletic Training (undergraduate); Health Promotion (undergraduate)

Describe your past and current professional positions and how you came to hold the job you now hold (How did you obtain the position?): During my senior year of undergraduate work, I interned at Saint Alphonsus Regional Medical Center in the Marketing Department. Upon my graduation, the internship position led into a full-time employment opportunity within the same department. I worked in this capacity for approximately one year when I obtained a promotional opportunity to work for the Idaho Department of Health and Welfare (IDHW). I worked in several capacities for the IDHW for ten years. Specifically, my positions were in the Division of Medicaid in the Regional Medicaid Services office as a Health Resources Coordinator in Medicaid's managed care program, Healthy Connections; in the Diabetes Prevention and Control Program; in the Physical Activity and Nutrition Program as a Health Program Specialist and finally as a Physical Activity and Nutrition Program Manager. These experiences honed my skills in grant writing to agencies such as the CDC and the U.S. Administration of Aging, negotiating and managing contracts, supervising employees, facilitating statewide networks for prevention activities, and creating and overseeing program budgets. Having these skills helped me obtain the Health Promotion Program Manager position at Central District Health Department in April 2012, where I helped guide the local health department's shift away from working on individual behavior change activities to that of broad-based population impact to increase access to physical activity and healthy eating opportunities.

Describe the duties of your current position: Within the Office of Health Promotion, my staff and I primarily focus on increasing access to physical activity and healthy eating along with reducing tobacco initiation and use. I also oversee the implementation of a senior fall prevention program and an agency worksite wellness program. Additionally, I conduct semiannual and annual performance reviews along with providing regular coaching and mentoring to staff. I lead staff in strategic and policy agenda planning utilizing a policy, systems, and environmental change approach to influence broad-based population impact, and negotiate and manage contracts with multiple agencies such as IDHW and nonprofit organizations. These are my major position duties. I'm also involved with staff in providing technical assistance and training to community partners, participating on state and local coalitions, alliances, and advisory boards with a physical activity, nutrition, tobacco prevention, and healthy aging emphasis.

Describe what you like most about this position: After working for ten years at a state agency, I've enjoyed gaining local-level experience. I appreciate the opportunity to work in each community to spend time developing and fostering relationships while gaining an understanding of the specific needs of that community. I have noticed I spend more time fostering partnerships through face-to-face meetings and phone calls than through email communication.

Describe what you like least about this position: Stable and ongoing funding for primary prevention has been problematic for public health. In the past, most funding opportunities came to us in a categorical manner or with a disease-specific focus. Recently, we are starting to see a shift to funding primary prevention work that is

BOX 1.1

continued

focused on mitigating chronic disease risk factors through broad-based population work. Public health funding continues to be inadequate and inconsistently funded so this is an ongoing challenge. Because we are often underfunded, we are limited on available human resources, which results in a challenge to have adequate staff to meet the workload demands.

In addition, we often have problems with programmatic silos in public health resulting in duplication of effort. Programs tend to work independently of each other, often using the same community-based partners. Unfortunately, in a small state like Idaho, many community-based partners are serving on multiple coalitions and alliances. It is not uncommon for me to attend two different coalition meetings within a short period of time and usually the same core group of people is in attendance. We talk about integration and streamlining efforts among programs and community partners, but it is difficult to put this into practice.

How do you use health data/epidemiology in your current position? We use health data to inform us on the current and changed state of our communities. These data help us determine the priority needs in each community for addressing access to physical activity, healthy eating, and tobacco use prevention. Within our four-county jurisdiction, we are working with several communities to implement the CDC-developed Community Health Assessment and Group Evaluation (CHANGE) Tool. The CHANGE Tool community health assessment affords us an opportunity to assess community strengths, identify areas for improvement, and assist the community with prioritizing community needs related to population-based strategies. Currently, we rely on state-collected data such as the CDC's Behavioral Risk Factor Surveillance System (BRFSS) and Youth Risk Behavior Surveillance System (YRBSS) to assess health behaviors, but we recognize there are health data gaps in Idaho. There are efforts underway to address these data gaps and develop a clearinghouse to store chronic disease risk factor data. We use best practice or evidence-based practices in our community-based work to create lasting, sustainable change. Our goal is to create an environment where the healthy choice is the default choice for all individuals.

What recommendations/advice do you have for current health education students desiring to become community health educators? I work with interns on a regular basis and am often interviewed by students seeking guidance for entering the public health field. I recommend developing skills to become a strong written and oral communicator. Much of our work is done through written documents and via oral presentations. I'm often asked to present to the Central District Health Department Board of Health or other groups within the community so being organized and comfortable with public speaking is key. Additionally, I write grant applications, reports, contracts, and communicate via email so strong written skills are a necessity. I recommend that students be nimble and flexible in their careers. Students need to know that an entry-level position may not be their dream job but it serves as an opportunity to develop skills and relationships with other individuals working in the field. It is a way to gain experience so when promotional opportunities are available, they can apply for them. It's also critical that students connect with working professionals through local, state, and national societies and associations. Oftentimes, networking opens the door for employment opportunities.

TABLE 1.3 **Selected mortality rates and their formulas**

Rate	Definition	Example (U.S. 2014)
Crude death rate	$\frac{\text{Number of deaths (all cause)}}{\text{Estimated midyear population}} \times 100{,}000$	799.5/100,000
Age-specific death rate	$\frac{\text{Number of deaths, } 45-54}{\text{Estimated midyear population, } 45-54} \times 100{,}000$	407.1/100,000
Cause-specific mortality	$\frac{\text{Number of deaths, (HIV)}}{\text{Estimated midyear population}} \times 100{,}000$	2.7/100,000

Source: Data from U.S. Department of Health and Human Services, National Center for Health Statistics (NCHS). (2015). *Health, United States, 2014: With Special Feature on Adults Ages 55-64.* Hyattsville, MD: Author.

contrast, is a clearly defined event, it has continued to be the most reliable single indicator of health status of a population. Mortality statistics, however, describe only a part of the health status of a population, and often only the endpoint of an illness process" (USDHHS, 1991, p. 15). Rates can be expressed in three forms: (1) crude, (2) adjusted, and (3) specific. A **crude rate** is the rate expressed for a total population. An **adjusted rate** is also expressed for a total population but is statistically adjusted for a certain characteristic, such as age. A **specific rate** is a rate for a particular population subgroup such as for a particular disease (i.e., disease-specific) or for a particular age of people (i.e., age-specific). Examples include calculating the death rate for heart disease in the United States or the age-specific death rate for 45- to 54-year-olds.

There are three other epidemiological terms that are used to describe the magnitude of a rate of some event, disease, or condition in a unit of population. They are (1) **endemic**—occurs regularly in a population as a matter of course, such as heart disease in the United States; (2) **epidemic**—an unexpectedly large number of cases of an illness, specific health-related behavior, or other health-related event in a population, like the recent Ebola outbreak in West Africa; and (3) **pandemic**—an outbreak over a wide geographical area, such as a continent. An example of a recent pandemic was the H1N1 flu outbreak in the United States. As you continue your preparation to become a health education specialist, you will be introduced to more and more epidemiological principles and terms.

Life Expectancy

Life expectancy is another means by which health or health status has been measured. However, it is also based on mortality. Even with this limitation, life expectancy has been described as "the most comprehensive indicator of patterns of health and disease, as well as living standards and social development" (CDC, 1994, pp. 2–8). **Life expectancy** "is the average number of years of life remaining to a person at a particular age and is based on a given set of age-specific death rates—generally the mortality conditions existing in the period mentioned. Life expectancy may be determined by sex, race and Hispanic origin, or other characteristics using age-specific death rates for the population with that characteristic" (NCHS, 2015, p. 424). The most frequently used times to state life expectancy are at birth, at the age of 65, and more recently at age 75 (see Table 1.1). It must be remembered that life expectancy is an average for an entire cohort (usually a single birth year) and is not necessarily a useful predictor for any one individual. In terms of evaluating the effect of chronic disease on a population,