



# *Essentials of* Public Health

SECOND EDITION

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# Dedication

*To Colleen*





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Richard K. Riegelman, MD, MPH, PhD, is Professor of Epidemiology-Biostatistics, Medicine, and Health Policy, and Founding Dean of The George Washington University School of Public Health and Health Services in Washington, DC. He has taken a lead role in developing the Educated Citizen and Public Health initiative which has brought together arts and sciences and public health education associations to implement the Institute of Medicine of the National Academies' recommendation that "... all undergraduates should have access to education in public health." Dr. Riegelman also led the development of George Washington's undergraduate major and minor and currently teaches "Public Health 101" and "Epidemiology 101" to undergraduates.



# Prologue

*Essentials of Public Health* by Bernard Turnock has made important contributions to the *Essential Public Health* Series. It was an early text in the series and set the stage for the long list of books that followed. Now, Dr. Turnock has turned his attention to putting together this *Second Edition*.

The *Second Edition*, like the first, takes advantage of Dr. Turnock's extensive experience working in governmental public health. His in-depth knowledge of health departments and the changes that are occurring in delivery of public health services is apparent throughout the book. He has a special interest and knowledge of careers in public health, which is highlighted throughout the text.

The text follows the same framework and style used in the *First Edition* including a large number of examples, charts, graphs, and discussion questions. The *Second Edition* updates and expands on the *First Edition* providing a state-of-the-art approach to public health and public health careers.

For those who want an introduction to public health with a special focus on public health careers and the workings of public health agencies, this is the perfect introductory text. Bernard Turnock writes with an approachable style and a depth of knowledge. We are pleased to have the *Second Edition* of *Essentials of Public Health* as a continuing part of the *Essential Public Health* series.

Richard Riegelman, MD, MPH, PhD  
Series Editor—*Essential Public Health* Series





# Preface

Blending basic public health practice concepts with the nuts and bolts of public health careers is both a unique approach and a real challenge for a public health text. This book addresses that challenge by focusing on basic concepts as well as career opportunities, topics that are often of interest for students in their undergraduate years. This approach is especially useful in undergraduate courses that provide an introduction to public health, either as a stand-alone survey course or as an introductory course for an undergraduate concentration or major. Students are exposed to key concepts underlying public health as a system and social enterprise, as well as to careers in the field. As a result, students will take away an understanding of what public health is and how various occupations and professions contribute to its mission and success.

The first five chapters cover important concepts and information on what public health is in 21st-century America. Basic concepts underlying public health are presented in Chapter 1, including definitions, historical highlights, and unique features of public health. This and subsequent chapters focus largely on public health in the United States, although information on global public health and comparisons among nations appear in Chapters 2 and 3. Health and illness and the various factors that influence health and quality of life are discussed in Chapter 2. This chapter also presents data and information on health status and risk factors in the United States and introduces a method for analyzing health problems to identify their precursors. Chapter 3 addresses the overall health system and its intervention strategies, with special emphasis on trends and developments that are important to public health. It highlights interfaces between public health and a rapidly changing health system. Chapter 4 examines the organization of public health responsibilities in the United States by reviewing its legal basis and the current structure of public health agencies at the federal, state, and local levels. Chapter 5 focuses on the community health improvement and emergency preparedness and response roles of public health, including the opportunities afforded by increased public expectations and a substantial influx of federal funding. Together, these five chapters serve as a primer on what public health is and how it relates to health interests in modern America.

But public health is more than concepts and organizations. Its important work is carried out by a diverse and committed workforce. Chapters 6 through 13 examine key aspects of the work of different public health occupations and professionals in order to provide an understanding of the basic underpinnings of public health jobs and careers. Despite an increasing recognition of its importance, there is little information available on the public health workforce in terms of its size, distribution, composition, skills, and impact on health goals. Chapter 6 examines overall trends affecting the public health workforce. Key characteristics for occupations and careers in public health practice are defined and explained in this chapter. This framework of career characteristics becomes the lens through which the major occupational categories and career pathways available to public health workers are examined. Chapters 7 through 13 provide basic information on many of those occupational categories and disciplines. The concluding chapter focuses on future implications for public health workers and those considering a career in public health.

Each chapter includes a variety of figures and tables that illustrate the concepts and provide useful resources for public health practitioners. A glossary of public health terminology is provided for the benefit of those unfamiliar with some of the commonly used terms, as well as to convey the intended meaning for terms that may have several different connotations in practice.

The story of public health is not a simple one to tell, in part because public health is broadly involved with the biologic, environmental, social, cultural, behavioral, and service utilization factors associated with health. Still, we all share in the successes and failures of our collective decisions and actions, making us all accountable to each other for the results of our efforts. My hope is that this book will present a broad view of the public health system and those who work within it in order to deter current and future public health workers from narrowly defining public health in terms of only what they do. At its core, the purpose of this book is to describe public health simply and clearly in terms of what it is, what it does, and why this work is important to all of us and fulfilling to those who do it on a daily basis.

Internet-based resources for courses based on this text are available at <http://go.jblearning.com/turnock2e>.



# Acknowledgments

Whatever insights and wisdom might be found in this book have filtered through to me from my mentors, colleagues, coworkers, and friends after more than three decades in the field. So many people have shaped the concepts and insights provided in this book that it would be foolhardy for me to try to acknowledge them all here. This book blends information and material from two other works published by Jones & Bartlett Learning—*Public Health: What It Is and How It Works, Fifth Edition* (2012) and *Public Health: Career Opportunities That Make a Difference* (2006). Mike Brown at Jones & Bartlett Learning was instrumental in providing guidance and suggestions for the development of this book. Production editor Renée Sekerak, also at Jones & Bartlett Learning, and copy editor Janet Kiefer helped make it a reality. I am grateful for their many and varied contributions.





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Bernard J. (Barney) Turnock, MD, MPH, is currently Clinical Professor and Director of the Division of Community Health Sciences, as well as Director of the Center for Public Health Practice and Illinois Public Health Preparedness Center at the School of Public Health, University of Illinois at Chicago (UIC). Since he joined UIC School of Public Health in 1990, he has also served as Acting Dean and Associate Dean for Public Health Practice. His major areas of interest involve performance measurement, capacity building, and workforce development within the public health system. He is board certified in Preventive Medicine and Public Health, and he has extensive practice experience, having served as Director of the Illinois Department of Public Health from 1985 through 1990, Deputy Commissioner and Acting Commissioner of the Chicago Department of Health, and State Program Director for Maternal and Child Health and Emergency Medical Services during his distinguished career. He has played major roles in a wide variety of public policy and public health issues in Illinois since 1978. He frequently consults on a variety of public health and healthcare issues and has served as a member of the Illinois State Board of Health and as President of the Illinois Public Health Association. He is also the author of two other recently published works: *Public Health: Career Choices That Make a Difference* and *Public Health: What It Is and How It Works*. He has received two prestigious awards from the American Public Health Association: one for Excellence in Health Planning and Practice and another for Excellence in Health Administration. He is also a recipient of the UIC School of Public Health's "Golden Apple" award for excellence in teaching, and he was the developer and instructor for UIC's first completely online course.

