

PREFACE

I wrote this text during the COVID-19 pandemic, a time Charles Dickens would have described as “the best of times” and “the worst of times.” It is, as the pandemic is still raging at the time of this writing, the best of times as the utility and significance of public health, epidemiology, and population health in keeping our communities healthy are being discussed in the mainstream media on a daily basis and the lay population is becoming an educated citizenry in these concepts. It is the worst of times because of the fear of a novel virus, mistrust of science, societal disruption, and most regrettably, the widespread morbidity and mortality. If ever there was a time for public health professionals and healthcare administrators to understand and implement public health, epidemiology, and population health tools, it is now. As tragic and trying as the COVID-19 pandemic is, it will not be the last novel infectious disease that tests our systems’ preparedness and resilience. For those who recall the SARS outbreak of 2002, many observers said that was a “dress rehearsal.” If so, then the COVID-19 pandemic is the “main production” that I contend we must learn from to advocate for more resources, prepare the public health and healthcare workforces and integrate their respective systems, and implement an interprofessional approach to the work of keeping our communities healthy. As dire as the data may seem some days, we must always be thinking about the public health mission and what we need to promote health, prevent disease, and protect the health of the populations we serve.

The public health and healthcare systems have made progress since the writing of the first edition of this text. Yet, there is more work to be done. I included the following passage from *Toward a Healthy Future: Second Report on the Health of Canadians*, by the

Federal, Provincial, and Territorial Advisory Committee on Population Health (1999, vii) in the first edition of this text as it simplistically calls for the integration of the public health and healthcare systems:

Why is Jason in the hospital?

Because he has a bad infection in his leg.

But why does he have an infection?

Because he has a cut on his leg and it got infected.

But why does he have a cut on his leg?

Because he was playing in the junk yard next to his apartment building and there was some sharp, jagged steel there that he fell on.

But why was he playing in a junk yard?

Because his neighbourhood is kind of run down. A lot of kids play there and there is no one to supervise them.

But why does he live in that neighbourhood?

Because his parents can't afford a nicer place to live.

But why can't his parents afford a nicer place to live?

Because his Dad is unemployed and his Mom is sick.

But why is his Dad unemployed?

Because he doesn't have much education and he can't find a job.

But why . . . ?

This vignette is powerful to me as it reminds us that the health of populations is complex and involves multiple determinants—those within our control and those not within our control. The interventions implemented to improve health must involve multiple stakeholders, and resources must be affordable, available, and effective to address the inequities in the community. Further, I am reminded that we need to adopt a collective view in our public health and healthcare systems to look “upstream” of the community’s health issues to try to intervene at the root cause of the problem—an innovative approach that requires the skills offered by public health and epidemiology to inform a population health management approach that has the ultimate goal of providing quality and affordable care measured by value, not fees. I share this vignette in the courses I teach because it serves, for me, as a reminder of the work remaining to be done and the direction we are heading.

The principles and skills that health administrators and public health practitioners need as they monitor, assess, and manage the health of populations in our reformed health-care system are described in this new textbook edition.

Population Health, Epidemiology, and Public Health: Management Skills for Creating Healthy Communities examines, in great detail, topics that are pertinent to the education and practice of public health and healthcare management in today's dynamic environment. Representative topics include core functions of public health, public health system organization, social determinants of health, disease prevention challenges, the basic science of public health, community health assessment, population health improvement approaches, the contribution of data to this process, and the role of systems thinking in improving a population's health.

In addition, the chapters of *Population Health, Epidemiology, and Public Health: Management Skills for Creating Healthy Communities* use real case studies and examples to educate today's students about the unique challenges and innovative approaches to evaluating and promoting the health of populations. In particular, the COVID-19 pandemic is highlighted throughout the text as a case study for public health and healthcare practice during challenging times. A third of this second edition includes new chapters focused on an expanded discussion of the social determinants of health, specific prevention challenges (e.g., adverse childhood experiences, e-cigarette or vaping product use-associated lung injury, the opioid epidemic), systems thinking, and application of concepts to the current state of the COVID-19 pandemic. Remaining chapters have been significantly revised and updated with respect to narrative, exhibits, exercises, and discussion prompts. The educational methodologies and case studies included herein impart the knowledge and skills required of today's healthcare manager and public health professional, presenting a roadmap for a population health improvement approach.

This book is a detailed resource that presents evidence-based approaches useful to instructors and students as they learn how to promote health, prevent disease, and navigate the public health and healthcare challenges of an ever-changing environment. The lessons and topic areas within the text are timeless and offer a framework that can be expanded on by instructors based on their own experiences. Although public health and healthcare crises can and will change over time, the key concepts and lessons provided within this book are essential to our efforts to improve the health of populations.

REFERENCE

Federal, Provincial, and Territorial Advisory Committee on Population Health. 1999. *Toward a Healthy Future: Second Report on the Health of Canadians*. Ottawa, ON: Minister of Public Works and Government Services Canada.

INSTRUCTOR RESOURCES

This book's Instructor Resources include a test bank; presentation PowerPoint slides; answer guides to the book's discussion questions, exercises, and assignments; and resource lists.

For the most up-to-date information about this book and its Instructor Resources, go to ache.org/HAP and browse for the book's order code (24451).

This book's Instructor Resources are available to instructors who adopt this book for use in their course. For access information, please e-mail hapbooks@ache.org.