

# EPIDEMIOLOGY OF CHRONIC DISEASE GLOBAL PERSPECTIVES

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**Production Credits**

Publisher: Michael Brown  
Editorial Assistant: Chloe Falivene  
Production Manager: Tracey McCrea  
Senior Marketing Manager: Sophie Fleck Teague  
Manufacturing and Inventory Control Supervisor: Amy Bacus  
Composition: Cenveo Publisher Services  
Cover Design: Kristin E. Parker  
Rights & Photo Researcher: Sarah Cebulski  
Rights & Photo Research Associate: Amy Rathburn  
Cover Image: © Knorre/Shutterstock, Inc.  
Printing and Binding: Edwards Brothers Malloy  
Cover Printing: Edwards Brothers Malloy

To order this product, use ISBN: 978-1-4496-5328-6

**Library of Congress Cataloging-in-Publication Data**

Harris, Randall E.  
*Epidemiology of chronic disease : global perspectives / Randall Harris.*  
p. ; cm.

Includes bibliographical references and index.

ISBN 978-0-7637-8047-0 (pbk.)

I. Title.

[DNLM: 1. Chronic Disease—epidemiology. 2. World Health—statistics & numerical data.

3. Epidemiologic Methods—Statistics. WA 900.1]

614.4\*273—dc23

2011052773

6048

Printed in the United States of America

16 15 14 13 12 10 9 8 7 6 5 4 3 2 1

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# Preface

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**E***pidemiology of Chronic Disease: Global Perspectives* is a book written for all students and teachers of the health sciences, particularly those in epidemiology, public health, and medicine. Its main purpose is to present current and comprehensive information on the epidemiology, etiology, pathogenesis, risk factors, and preventive factors of common chronic diseases. In writing the book, I have made liberal use of the internet and drawn upon worldwide information to address the global landscape of chronic diseases.

Specific chapters are devoted to the epidemiology of each of forty major chronic diseases and conditions. The book is organized into eight distinct sections beginning with an introductory chapter on “*the epidemiologic transition*” whereby chronic diseases have replaced acute infectious conditions concurrent with improved health care and increasing longevity in many populations of the world. Subsequent sections cover cardiovascular and cerebrovascular diseases (coronary heart disease, myocardial infarction, stroke, hypertension), major forms of cancer (lung cancer, head and neck cancer, esophageal cancer, stomach cancer, colon cancer, pancreatic cancer, liver cancer, breast cancer, ovarian cancer, cervical cancer, prostate cancer, bladder cancer, kidney cancer, sarcoma, malignant melanoma, lymphoma, leukemia and brain tumors), diseases of the respiratory tract (chronic obstructive pulmonary disease, asthma), metabolic and digestive diseases (diabetes mellitus, obesity, thyroid disease, kidney disease, liver disease), musculoskeletal diseases (osteoporosis, arthritis), neurodegenerative diseases (Alzheimer’s disease, Parkinson’s disease, schizophrenia, epilepsy, multiple sclerosis), and finally, three infectious diseases (tuberculosis, malaria, and HIV disease) that often manifest as chronic conditions.

All chapters follow a similar format with subsections describing diagnostic criteria, historical perspectives, the global burden of disease, population differences and time trends in incidence, prevalence,

disability and mortality, mechanisms of pathogenesis, risk factors, preventive factors and opportunities for disease prevention and control. Key epidemiologic studies and findings are presented in chronological order with supporting evidence and references selected to guide readers to further study. It is assumed that students and readers are building on a knowledge base of basic epidemiology and human biology. The text blends the traditional elements of epidemiology with human anatomy, physiology, and molecular biology.

It is my hope that the text will provide a forum for examining current hypotheses regarding chronic disease epidemiology. Subsections of each chapter focus upon controversial topics in the epidemiology of each disease. This format facilitates active student discussion of molecular mechanisms of disease pathogenesis and the relevant epidemiologic issues pertaining to the prevention and control of chronic diseases.

In essence, this book is an amalgamation of a longstanding continuum of the exchange of ideas and information with many colleagues in the fields of medicine, public health, epidemiology, biostatistics, genetics, pathology and molecular biology. I am therefore deeply indebted to mentors, colleagues, and particularly, students who have contributed to my education, research and teaching over the past four decades. I also gratefully acknowledge my coauthors, Susanne K. Scott, who wrote early drafts of the chapters on diabetes and obesity, and Zachary M. Harris, who contributed to the chapter on multiple sclerosis. The book clearly reflects the professional detail of the editorial and production staff of Jones & Bartlett Learning, and any errors and omissions in content as well as opinions on controversial issues are my responsibility. Finally, I am most grateful to my family for their support and understanding during the writing of this book.

Randall E. Harris

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