What’s New to the Fifth Edition!

*Epidemiology for Public Health Practice* has evolved into a standard work for Master of Public Health students and undergraduate public health students who wish to obtain familiarity with epidemiologic concepts. The fifth edition continues the authors’ tradition of writing in an accessible style and providing the most up-to-date information in order to command readers’ interest in epidemiology. In this extensive revision, as an aid to learners and instructors, the authors have incorporated many new figures, charts, and illustrations in order to create an exciting and rewarding learning experience. The authors hope that readers will retain the text in their personal libraries and use it frequently in their practice of public health.

Specific Chapter Updates:

Chapter 1. History and Scope of Epidemiology—UPDATED!

- Updated data
- Information on 2009 H1N1 pandemic
- New images and updated older images
- Updated chart: presentation of epidemiologic data
- Updated chart: Pneumonia and influenza mortality
- New chart on the interdisciplinary nature of epidemiology
- Glossary of terms used in the yearly bill of mortality for 1632
- Expanded information on cholera and John Snow

Chapter 2. Practical Applications of Epidemiology—UPDATED!

- Updated information on leading causes of death
- Expanded discussion of population dynamics and predictions about the future
- More information provided on health of the community and health disparities, including the GINI index

Chapter 3. Measures of Morbidity and Mortality Used in Epidemiology—UPDATED!

- New chart: Overview of epidemiologic measures
- New example on prevalence of obesity
- Expanded coverage of epidemiologic measures, e.g., sex ratios, perinatal mortality
- More information on interrelationships between prevalence and incidence

Chapter 4. Descriptive Epidemiology: Person, Place, Time—UPDATED!
Updated coverage of morbidity and mortality data by descriptive epidemiologic variables provided throughout the chapter with 140 reference citations
• New examples of case studies and case series
• New information on age effects associated with morbidity and mortality
• Many new charts added to this chapter
• Updates on Census 2010, with current definitions of race/ethnicity

Chapter 5. Sources of Data for Use in Epidemiology—UPDATED!

• Updated information on data sources including notifiable diseases
• Further clarification of criteria for the quality of epidemiologic data
• Rationale strengthened for the need of high-quality epidemiologic data

Chapter 6. Study Designs: Ecologic, Cross-Sectional, Case-Control—UPDATED!

• New chart: Overview of epidemiologic study designs
• Clarification regarding design and applications of case-control studies
• More information on matching in case-control studies

Chapter 7. Study Designs: Cohort Studies—UPDATED!

• Updated data and new figures
• Additional clarification of terminology used in cohort studies
• Exhibit on life table methods updated to the most recent information

Chapter 8. Experimental Study Designs—UPDATED!

• Updated data including further explanation of intervention studies
• Description of the Women’s Health Initiative
• Several new images, including image of scurvy victim
• Discussion of phase 4 clinical trials for a cancer drug
• New table: Glossary of terms used for clinical trials
• Uses of epidemiology for vaccine-preventable conditions, e.g., HPV vaccine

Chapter 9. Measures of Effect—UPDATED!

• Updated data
• New image added: Osteoporosis

Chapter 10. Data Interpretation Issues—UPDATED!

• Updated data
• New charts and figures added
• Expanded discussion of Simpson’s Paradox
Chapter 11. Screening for Disease in the Community—UPDATED!

- New figure showing participants in a mammogram and a blood pressure screening test
- New figure showing participation rates in screening for colorectal cancer, breast cancer and cervical cancer
- Updated discussion on controversies in screening
- Difficulties with false positive screening test results

Chapter 12. Epidemiology of Infectious Diseases—UPDATED!

- Many updated charts showing data on disease incidence and prevalence, e.g. measles, malaria, hepatitis, coccidioidomycosis, Lyme disease
- Information on cholera epidemic in Haiti
- Revised exhibit on viral hepatitis
- Current status of HIV/AIDS


- New information on methodologic topics, e.g., exposure assessments, clustering, and confounding
- Updated data on blood lead levels and mercury advisories
- New topics: global warming, BP oil spill, and Japanese tsunami and its effects on the Fukushima nuclear reactor
- Many new images to capture readers’ interest in this topic

Chapter 14. Molecular and Genetic Epidemiology—UPDATED!

- New diagram of Mendelian inheritance
- Additional discussion of the population genetics concept of linkage disequilibrium
- Expanded discussion of the concept of haplotypes
- This chapter is updated thoroughly with the latest developments

Chapter 15. Social, Behavioral, and Psychosocial Epidemiology—UPDATED!

- Many new illustrations added to this chapter
- The concept of community-based participatory research added
- New information on the social context of health, e.g., poverty, the Glasgow effect
- Healthy People 2020-overarching goals
- Update on depression

Chapter 16. Epidemiology as a Profession—UPDATED!

- Updated to show current professional resources and issues
- New exhibit on salaries of epidemiologists