

FORENSIC EPIDEMIOLOGY

INTEGRATING PUBLIC HEALTH AND LAW ENFORCEMENT

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About the Author

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Preface

Events on local, national, and international levels have accentuated the need for joint investigation and collaboration between public health and law enforcement functions and their reliance on forensic epidemiology. As an example, past investigations have focused on risk factors for family violence and partner and child homicide, deaths among residents of nursing homes and other healthcare facilities, and the intentional infection of individuals with HIV and/or other sexually transmitted infections by individuals who knew that they were infected with the disease in question. The anthrax attacks on high-profile individuals and seats of government further underscore the need for such collaborative efforts and the development of an appropriate knowledge base across the relevant disciplines.

This text focuses specifically on the integration of principles and methods of epidemiology with law enforcement functions in the administrative and criminal contexts. This integration is essential if we are to enhance our ability to address critical events such as those previously

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indicated. The text expands the scope of coverage of two previously published texts by this author that also focus on forensic epidemiology: *Forensic Epidemiology* (SIU Press), which focuses primarily on concepts of causation in the context of civil law, and *Case Studies in Forensic Epidemiology* (Kluwer Academic/Plenum Publishing), which both expands upon the concepts in *Forensic Epidemiology* and addresses the use of epidemiology in the context of regulatory and legislative activities, in addition to civil litigation.

The first portion of *Forensic Epidemiology: Integrating Public Health and Law Enforcement* provides the reader with an overview of public health, administrative, and criminal law and foundational concepts in the use of evidence in administrative and criminal proceedings. The second portion of the text is devoted to an examination of the intersecting issues through the use of case studies in the areas of communicable disease, mental health and substance use, partner violence, biological terrorism, and environmental concerns, such as environmental tobacco smoke and exposure to television violence. The final portion of the text concludes with a look toward the future and suggestions for the training of professionals.

The case studies presented here challenge us to examine various policy issues. These policy questions include how to reconcile the goals of science with those of the legal system; the extent to which society is willing to tolerate a lack of perfect synchronicity between the infliction of harm against others and the retribution to be exacted; and how to balance the public health against the personal freedoms and interests of individuals and corporations in developing and enforcing standards. These questions also prompt readers both to evaluate their own values as they relate to these larger questions and to contemplate how they, as scientists, legislators, policymakers, and individuals, will manifest those values in relating to the larger world.