

## Foreword



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*Consulting Editor*

Thousands of years before physicians began focusing their attention on advanced resuscitation, cardiology, critical care, and surgery, “healers” primarily concerned themselves with ridding the body of “tiny creatures” that could cause illness: “certain minute animals, invisible to the eye...[that] reach the inside of the body...and cause disease” (Varro, 1st century B.C.) [1]. For thousands of years, plagues and epidemics caused by “simple” infections have affected national leaders, armies, cultures, societies, and even world history. Infections small enough to be transmitted by the bite of a mosquito are responsible for more loss of human life than all the wars in human history combined. Some of the greatest physicians in recent centuries, including Lister, Jenner, Pasteur, Koch, Reed, and Ehrlich, made their mark by way of their discoveries that helped fight infections. It is argued easily that the very profession of medicine was born from the fight against infectious disease.

Despite the advances in medical therapies and biomedical technology, the modern medical profession is, still in many ways, at the mercy of infections. Although we appear to have conquered or limited some infectious diseases, the re-emergence of “old” infections and the emergence of newer ones continue to challenge us. Tuberculosis, once thought to be well-controlled, has re-emerged with a vengeance, resistant to many standard therapies. The constant threat of terrorism threatens to return diseases that were once thought to be “conquered,” such as smallpox and the plague. Viruses, such as HIV and influenza, are a constantly changing international threat. Bacteria that once were considered “simple,” such as *Staphylococcus aureus*, have evolved

to develop resistance against usual antibiotics. Also, pneumonia continues to be a leading killer among the elderly. The medical profession's war against infections rages on, and physicians continue the struggle to minimize the toll in human lives.

In this issue of *Emergency Medicine Clinics of North America*, Dr. Daniel R. Martin (Guest Editor) has assembled an outstanding group of authors who provide updates on the "current state of war" against infectious disease in emergency medicine. They discuss the common diseases that are encountered in everyday clinical practice, such as urinary infections, community acquired pneumonia, and food borne infections. They also discuss less common but high-risk diseases, such as central nervous system and other rapidly fatal infections. Separate articles are devoted to special populations, including elderly patients, pregnant patients, and patients who have HIV. Controversies related to the timing of antibiotics, treatment of methicillin-resistant *Staphylococcus aureus*, and the use of vaccine programs in the emergency department are addressed. Finally, the recent increased use of hyperbaric oxygen for treatment of certain infections is discussed as well.

If knowledge is to be considered a weapon in the war against infectious disease, this issue of the *Emergency Medicine Clinics of North America* represents an important addition to our arsenal. Dr. Martin and his colleagues have summarized, in a single source, the most up-to-date knowledge of large portions of an ever-changing and ever-threatening field. It is critically important that emergency physicians stay apprised of these newest concepts to continue the battle against infections. My thanks go to Dr. Martin and his colleagues for their valuable work.

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## Reference

- [1] Lyons AS. Infection. In: Lyons AS, Petrucelli RJ, editors. *Medicine: An illustrated history*. New York: Harry N. Abrams, Inc.; 1987. p. 549–64.