

# Preface

Until recently, we in the United States have not given much thought to the specter of chemical and biological warfare. Our fathers and grandfathers who fought in World War I are almost all gone now, and the poet's image of gassed soldiers fumbling for their helmets has been considered merely a historical footnote—if it is remembered at all. But forgetting is a luxury we can no longer afford. In 1917, the Army War College stated:

The employment of poisonous gases as a means of offensive warfare has made it imperative that medical officers should have some knowledge of the action of the various gases that are likely to be met with and of rational lines of treatment which may be adopted in cases of gas poisoning.<sup>1(p5)</sup>

Nothing has changed except the increased availability of chemical and biological weapons; now more than ever we must be able to both defend against attack and manage chemical and biological casualties.

The good news is that the development of passive countermeasures for chemical and biological defense (pretreatments, therapies, timely detectors, effective protective equipment) has significantly reduced the threat to our military forces. Although the biological defense countermeasures program is not yet as advanced as its chemical counterpart, new developments in biotechnology have allowed us to take tremendous strides forward. In the meantime, we can educate our healthcare providers now, at minimal cost and with great potential benefit. One of the reasons that chemical and biological weapons are considered so dangerous is that we medical officers, in our daily clinical practice, hardly ever see patients whose conditions have any similarity to casualties of chemical and some of the more exotic biological agents.

This textbook focuses on the management of casualties. Its publication may be even more timely than we had expected, especially considering the increased threat of terrorism—both foreign and domestic. Terrorist attacks at home and abroad have heightened the interest of civilian healthcare providers and first-responders, and of other governmental agencies such as the Federal Emergency Management Agency and the Public Health Service that would be required to respond in case of an attack on our own soil. These nonmilitary healthcare providers will also find this textbook to be extremely useful.

The scientists who organized and are responsible for this textbook are recognized worldwide as the foremost experts in the medical aspects of chemical and biological warfare. Their overriding goal is this: to produce a force that understands the threats of chemical and biological weapons and how to respond to them, and, by understanding the threats, sustains fewer casualties.

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1. Army War College. *Memorandum on Gas Poisoning in Warfare, With Notes on its Pathology and Treatment*. Washington, DC: Government Printing Office; 1917: 5.

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The current medical system to support the U.S. Army at war is a continuum from the forward line of troops through the continental United States; it serves as a primary source of trained replacements during the early stages of a major conflict. The system is designed to optimize the return to duty of the maximum number of trained combat soldiers at the lowest possible echelon. Far-forward stabilization helps to maintain the physiology of injured soldiers who are unlikely to return to duty and allows for their rapid evacuation from the battlefield without needless sacrifice of life or function.

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