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## **MEDICAL ASPECTS OF CHEMICAL AND BIOLOGICAL WARFARE**

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The Coat of Arms  
1818  
Medical Department of the Army

A 1976 etching by Vassil Ekimov of an  
original color print that appeared in  
*The Military Surgeon*, Vol XLI, No 2, 1917

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The first line of medical defense in wartime is the combat medic. Although in ancient times medics carried the caduceus into battle to signify the neutral, humanitarian nature of their tasks, they have never been immune to the perils of war. They have made the highest sacrifices to save the lives of others, and their dedication to the wounded soldier is the foundation of military medical care.

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# Textbook of Military Medicine

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. . . .  
 Gas! Gas! Quick, boys!—An ecstasy of fumbling,  
 Fitting the clumsy helmets just in time;  
 But someone still was yelling out and stumbling  
 And flound'ring like a man in fire or lime . . .  
 Dim, through the misty panes and thick green light,  
 As under a green sea, I saw him drowning.  
  
 In all my dreams, before my helpless sight,  
 He plunges at me, guttering, choking, drowning.<sup>1</sup>

. . . .  
 —Wilfred Owen

The poetry, excerpted from *Dulce et Decorum Est*, was written by Lieutenant Wilfred Owen of the Royal Army, who was killed in action in France on 4 November 1918.

“Gassed,” the frontispiece painting, shows the horror of chemical warfare in World War I as perceived by the artist, Gilbert Rogers.<sup>2</sup> As Keegan and Darracott observed, “Rogers was an officer of the Royal Army Medical Corps commissioned to record medical work during the First World War. The subtitle to this painting, “In Arduis Fidelis” (Faithful in Hardships), suggests the subject is a stretcher-bearer who has succumbed to gas while transporting wounded.”<sup>3</sup>

1. Excerpted from Wilfred Owen. *Dulce et decorum est*. In: *The Collected Poems of Wilfred Owen*. Copyright © 1963 by Chatto & Windus, Ltd. Reprinted by permission of New Directions Publishing: New York, NY.

2. Painting: Printed with permission from Imperial War Museum, London, England.

3. Keegan J, Darracott J. *The Nature of War*. New York, NY: Holt, Rinehart and Winston; 1981: 222.

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Interested readers can also find up-to-date information on the medical aspects of chemical and biological warfare at the following internet locations:

|                                                                |                                                                                                                                      |
|----------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| The Medical NBC Information Server                             | <a href="http://www.nbc-med.org">http://www.nbc-med.org</a>                                                                          |
| Medical Research and Materiel Command                          | <a href="http://mrmc-www.army.mil">http://mrmc-www.army.mil</a>                                                                      |
| Medical Chemical Defense                                       | <a href="http://mrmc-www.army.mil/chemdef.html">http://mrmc-www.army.mil/chemdef.html</a>                                            |
| Medical Biological Defense                                     | <a href="http://mrmc-www.army.mil/biodef.html">http://mrmc-www.army.mil/biodef.html</a>                                              |
| Medical Research Institute of Chemical Defense                 | <a href="http://chemdef.apgea.army.mil">http://chemdef.apgea.army.mil</a>                                                            |
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