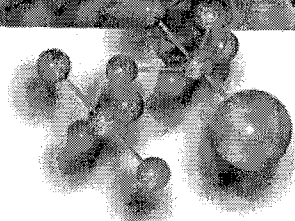


Exhibit H



Health Effects from Chemical



Independent Study Course Released: October 2003

Sponsored by
Department of Veterans Affairs
Employee Education System

This is a Veterans Health Administration System-Wide Training Program sponsored by the Veterans Affairs Employee Education System and the Office of Public Health and Environmental Hazards, Department of Veterans Affairs. It is produced by the Employee Education System.





DEPARTMENT OF VETERANS AFFAIRS
UNDER SECRETARY FOR HEALTH
WASHINGTON DC 20420

A MESSAGE FROM THE UNDER SECRETARY FOR HEALTH

Dear Colleagues in Quality Health Care:

I am very pleased to present the enclosed Veterans Health Initiative (VHI) independent study guide on the basics of "Health Effects from Chemical, Biological and Radiological (CBR) Weapons". "Health Effects from Chemical, Biological and Radiological Weapons" is designed and written by VA physicians and experts in chemical, biological, and radiological warfare and treatment. Clinicians treating our nation's Veterans must be aware of the specific conditions that may confront individuals with injuries associated with CBR. Since some of the Veterans the VA receives may have already experienced the exposure to one of the agents contained in these weapons, it is important that VA health care providers are aware of the need to know the best way to treat these life-threatening problems. Greater general awareness of the specialized health issues facing persons with CBR injuries is needed to assure therapeutically appropriate clinical processes.

The Education Contact at your medical center has the necessary information so you can receive continuing medical education credits for studying this book and successfully completing the accompanying test. It is my expectation that every practitioner in the VA system will complete this course. I hope that you will keep this book available for reference when you have the opportunity to provide care for veterans with CBR injuries in the future. This ensures that provisions are made for quality health care across the continuum of acute care, rehabilitative care, to extended care. VA may see Veterans with CBR injury and being prepared to handle these injuries in a variety of health care settings, ensures the best care possible. The Veterans are counting on you to provide the best care possible. We owe them nothing less.

A handwritten signature in black ink, reading "Robert H. Roswell, M.D." in a cursive style.

Robert H. Roswell, M.D.

Table of Contents

Introductory Materials

Message from the Under Secretary for Health	
Independent Study Outline	
Program Description	
Program Implementation and VA Implementation Procedure	
Program Development	
AMA and ANCC Continuing Education Credit	
Disclosure Statement and American with Disabilities Act Policy	

Content Materials

Part 1

U.S. Chemical Warfare Agent Human Experimentation and Long-Term Veteran's Health	1
History of U.S. Chemical Warfare Agent Human Experimentation	3
A Growing Awareness	11
Long-Term Health Effects amongst Experimental Subjects	17

Part 2

Health Effects from Chemical and Biological Agents and Radiological Weapons	25
Chemical Warfare Agents	27
Toxic Pesticide Agents	35
Biological Warfare Agents	39
Radiological Warfare Weapons	59
VA Programs to Prepare for Casualties from Attacks with Chemical, Biological, and Radiological Weapons	69

Appendices

References	75
Additional Readings	79
Independent Study Questions for Continuing Medical Education (CME) Credit	81
Independent Study Program Registration/Answer Sheet/Participation Satisfaction Form	

Independent Study Outline

The recent crises in Afghanistan and then Iraq, and the terrorist attacks in the U.S in September 2001 have resulted in a very unstable political and military situation around the globe. This situation has required that the VA and DoD review and update it's information on chemical, biological, and radiological (CBR) weapons and agents. This VHI provides essential information for health care providers about the CBR threat in the U.S. and abroad.

This independent study module is a part of the Veterans Health Initiative (VHI). The VHI is a comprehensive program of continuing education designed to improve recognition and treatment of health problems related to military service, specifically health issues related to chemical, biological, and radiological weapons and agents.

After completing this independent study, participants will be able to:

1. describe the long-term effects from the military experiments involving human subjects exposed to chemical, biological, and radiation weapons and agents;
2. explain the history of the U.S. military programs involving chemical, biological, and radiation as military weapons;
3. identify the psychological effects of being involved in human experiments with these military weapons;
4. identify how various classes of chemical agents are absorbed and eliminated from the body;
5. list the typical signs and symptoms of exposure to various classes of chemical warfare agents and to their pesticide counterparts, where relevant;
6. differentiate the signs and symptoms one might observe following infection with common biological weapon agents, including anthrax, botulism, plague, smallpox, tularemia, and viral hemorrhagic fever (VHF);
7. outline briefly the 3 categories of biological agents as defined by CDC;
8. describe how a "dirty bomb" can produce radiation exposure in a victim;
9. describe the signs and symptoms of acute radiation exposure; and
10. list the VA programs developed to care for casualties from attacks with chemical, biological, and radiological weapons.

The expected outcomes of this independent study are to improve the quality of health care provided to military personnel who place themselves in harm's way. Drug treatments and dosages provided in this study guide should be double-checked prior to prescribing therapy.

Purpose

Background

Objectives

Outcome