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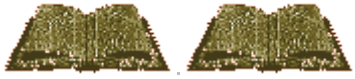
Reviews: Online Courses



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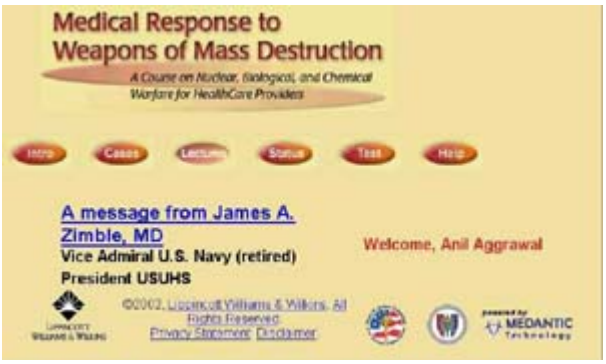
INFORMATIVE AND USEFUL

Medical Response to Weapons of Mass Destruction: (A Course on Nuclear, Biological, and Chemical Warfare for Health Care Providers), 13 lectures and 10 case studies (with voice-over). 18 credit hours, by Uniformed Services University of the Health Sciences (USUHS)
(with A message from James A. Zimble, MD Vice Admiral U.S. Navy (retired) President USUHS)
Lippincott Williams & Wilkins, (A Wolters Kluwer Company), 530 Walnut Street, Philadelphia, PA 19106-3621, USA. Release Dates: July 1, 2002. 13 lectures and 10 case studies (with voice-over). 18 credit hours. Price: Institution $65.00 per user for the first 25 users (discounted afterwards), Single user $299.00.
Course Website: www.wmdcourse.com
Take a free demo by Clicking here
Enquiries: wmdcourse@lww.com

Starting screen of the course. Various buttons allow you to access different facilities.



Thirty year old Patricia Fuchs is brought to a tertiary care center's emergency room by a friend who gives the majority of the history because Patricia is not able to speak clearly. The friend states that Ms. Fuchs was doing well when she returned from a large political fund-raising banquet that was held out-of-state 2 days ago. Patricia called the friend the previous day. She was difficult to understand because she sounded "tongue-tied," but she said that her arms felt weak. When the friend visited Ms. Fuchs this morning, she found her barely able to walk and not able to speak clearly. She had not eaten in over 24 hours because of difficulty swallowing and choking on food and liquid. She was too weak to walk up a flight of stairs, so the friend brought her to the ED.

Ms. Fuchs was able to give limited history because of unintelligible speech. She could respond to yes/no questions with her head and she did not report having taken any drugs. She affirmed that she could hear everything just fine but she could also nod "Yes" when asked if she had trouble seeing and trouble swallowing. She did not report headache or any other discomforting pain.

Her neurologic examination revealed some interesting signs. Her speech was dysarthric and dysphonic. She could not raise her tongue to the roof of her mouth. The uvula was midline. Gag reflex was nearly absent. Bilateral ptosis was present. Her pupils were mildly dilated and sluggishly reactive. There was a disconjugate gaze but no nystagmus. She could not abduct either eye greater than about 10° from midline. There was facial symmetry with smiling but loss of periorbital creases. Head rotation, flexion, and extension were severely weak with resistance. There was marked proximal and distal muscle weakness without spasticity in all extremities symmetrically but greater in the upper extremities. DTRs were diminished throughout. There was no appreciable loss of touch, pain, or heat/cold sensation or vibratory sense.

What is she suffering from? Any ideas?

A sample lecture from this course. This one gives an overview of the chemical agent Cyanide. You can use the "stop", "<< rewind", "forward >>" and "play >" buttons in the usual manner. You may want to wait for some time for the course to load (270,817 bytes). The voice may break at times, if the internet connection is slow.

Welcome to *Lippincott Williams & Wilkins*' Online course entitled *Medical Response to Weapons of Mass Destruction*, where you get to read not just this, but nine other baffling cases. We in the medical profession keep hearing about similar cases. So what is so special about these cases? Just this: the patients have all been inflicted by some or the other weapon of mass destruction. For those of us, who are still guessing, Patricia is suffering from botulism - a disease caused by an agent of mass destruction! It is believed that terrorists may strike their targets with such agents in the future.

We are living in a dangerous and uncertain world. As if poverty, widespread unemployment and disease were not enough, we are now faced with a new agent of horror - terrorism by disgruntled groups the world over. Whether it is India, Israel, China, Russia, UK or USA, no country is now exempt from it. The terrorist attack on the United States on 11 September 2001 demonstrated the evil and horrific power of terrorism. Nineteen terrorists inflicted death, mass casualties, and deep psychological wounds not only on the US citizens but on whole of humanity. Constant and repetitive media coverage presented images that will likely remain with each of our citizens forever. Today's terrorists have the ability to create new, more devastating actions to perpetuate fear and inflict physical harm.

Actual and threatened use of weapons of mass destruction by terrorists and other criminals is a reality. Biological agents place human beings in harm's way directly and indirectly through personal, agriculture, and animal contamination. Public health capabilities are being strengthened through proactive planning across the health system. Few of today's medical professionals have experience with symptoms resulting from nuclear, biological, and chemical agents.

Gone are the days when wars were fought with conventional weapons such as bombs. Experts predict that future wars may probably be covert ones fought with biologic agents. Several biological agents (and associated diseases) suitable for warfare have already been identified. Some of these are anthrax, brucellosis, plague, Q fever, tularemia, smallpox, viral encephalitides, viral hemorrhagic fevers, botulinum and staphylococcal enterotoxin b. Similarly a number of chemical agents have been identified, not the least horrible of which are the nerve agents like Sarin and VX.

India has had a few unprecedented (and unexplained) plague epidemics in the last decade, and many people secretly think that these epidemics could be the manifestation of a covert biological attack by some enemy. The "beauty" of such attacks is that you may never get to know who your adversary was! And that is why such agents appeal to terrorists very much.

With the threat of chemical and biological warfare looming large on mankind, dire need exists to rapidly equip medical professionals with the information and decision making skills vital in response environments. Web based delivery provides for anywhere, anytime access to the information. This online course provides this kind of web based information.

The course appears to have well defined learning objectives. Upon completion of this activity, the participant should be able to identify signs and symptoms, discuss appropriate treatment and preventive measures, and outline the necessary precautions the health care professional should take when caring for victims in emergencies created by weapons of mass destruction.

At the conclusion of this learning activity, the participant will be able to identify the signs and symptoms associated with emergencies created by weapons of mass destruction, discuss the appropriate preventive and treatment intervention options available for these emergencies, and outline necessary precautions health care providers should take when caring for victims of weapons of mass destruction.

The TEN cases discussed in this online course. They are all by Aileen Marty, M.D., CDR, MC, USN. You may want to wait for some time for the pictures to load.

	Case No.	Case Description
	1	**A woman with difficulty speaking and muscle weakness.**

		
	2	**A man with fever, headache, anorexia, and confusion**
	3	**A farmer with a flu-like illness**
	4	**A 40-year-old man with urinary and fecal incontinence, convulsions, and respiratory distress**
	5	**An 18-month-old African American child with fever and rash**
	6	**An 11-year-old boy with nonhealing wounds**
	7	**A middle-aged man with swollen eyes, wheezing, and skin rash**
	8	**A woman with sudden onset of fever, cough, and hemoptysis**
	9	**A woman with vomiting and respiratory distress loses consciousness in the ED.**
	10	**A small-town mayor with sudden delirium**

The topics

The course is presented through a series of 13 lectures and 10 case studies. The running time of each lecture is approximately 20 to 40 minutes, and each case takes approximately 30 minutes to complete. The promoters of the course recommend that the participant first study the lectures, then challenge himself with the cases. While working through the cases, it might be useful to spend time comparing and contrasting the manifestations of illnesses that are in the differential diagnoses.

The thirteen lectures in this online course are divided into four sections. Section 1 entitled "General Principles" includes two lectures. These are "Principles of Emergency Decontamination" by Joshua S. Vayer, MD and "Psychosocial Aspects of Weapons of Mass Destruction" by Timothy Lacy and David M. Benedek. Section 2 is entitled "Biological Agents" and gives information about four potent biological agents which can be used by terrorists as weapons of mass destruction. These are the organisms for Anthrax (by Aileen M. Marty), Plague (by Aileen M. Marty), Smallpox (by Aileen M. Marty) and Venezuelan Equine Encephalitis (by Franziska B. Grieder and Bruce A. Schoneboom). The section on Chemical Agents lists six agents (some of them are groups such as incapacitating agents and nerve agents). These agents are Botulinum Toxin (by Aileen M. Marty, MD, CDR, MC,

USN), Cyanide (by James M. Madsen, MD, MPH, LTC(P), MC-FS, USA), Incapacitating Agents (by James M. Madsen, MD, MPH, LTC(P), MC-FS, USA), Mustard (by Aileen M. Marty, MD, CDR, MC, USN), and Nerve Agents (by James M. Madsen, MD, MPH, LTC(P), MC-FS, USA). The sixth topic in this section is on the nerve agent Sarin whose mechanism of action is discussed. This section has been prepared by James M. Madsen, MD, MPH, LTC(P), MC-FS, USA. The final section is entitled "Nuclear Agents", and it discusses just one topic - Radiation Injury by John M. Jacocks, MD, MTM&H, COL, USA.

After I was sent the (complimentary) password by the publishers, I spent full five days listening to the lectures (yes, I sat almost six hours each day, listening to the lectures over and over again, and working my way through the interesting cases!). Although much of what was spoken was already known to me, yet I enjoyed the lectures. Why? Firstly it was a good recapitulation of all the facts. Second, the numerous animations designed in Macromedia flash captured my attention. Indeed they tend to explain some basic concepts in a very interesting manner. A good exmaple is the lecture on Botulinum toxin, where the mechanism of action of this toxin is explained.

The lectures give useful insights into the history of use of each of these agents in warfare and other illegal activities. Finally and perhaps most importantly, the lectures give us such informations as clinical features, diagnosis, management and prophylaxis against each of these agents. Medical professionals are taught how best they can handle the situation, should they come to face mass fatalities with these agents. While the voice-over explains, you get to see the same text in a small window at the bottom. I realized, one can copy and paste information from that little box. This facility could profitably be used in a number of ways.

...the numerous animations designed in Macromedia flash captured my attention. Indeed they tend to explain some basic concepts in a very interesting manner. A good exmaple is the lecture on Botulinum toxin, where the mechanism of action of this toxin is explained...

The lectures are fully interactive and allow you to manipulate them in a number of ways. If you find the pace too fast, you can stop the lecture, pore over what has already been said (this can be seen on the screen), absorb and mull over the facts and then go forward. You can rewind the course completely just like you would rewind a cassette in a video, or you can fast forward it. Indeed in the sample lecture provided above and to the right, you can do all these manipulations.

To get to know more about the course, you can take a demo at www.wmddemo.com . This site lists all the cases but only two can be accessed. These are the ones on Anthrax and Nerve Agents. You may want to try this demo right now by clicking here. This would give the participant important "hands on" experience.

How does one participate?

The *Medical Response to Weapons of Mass Destruction* online course not only educates the physicians but also enables them to earn 18 hours of category 1 credit toward the AMA Physician's Recognition Award. Learning is determined by a posttest, taken upon completion of the entire course. Participants must correctly answer 80% of the questions to earn the credit. The student is able to print a copy of his/her CME Certificate after successful completion of the online course and posttest.

In today's uncertain global environment, one may confront challenging medical scenarios caused by a nuclear, biological, or chemical weapon of mass destruction. *Medical Response to Weapons of*

Mass Destruction is an online course designed to impart information about the most potentially threatening agents used in terrorist attacks.

This course consists of lectures and cases that will help the participant learn about subtle and overt clinical and epidemiologic clues to a terrorist event. By working through the cases and viewing the lectures, one will achieve a working knowledge of how to diagnose and treat patients who present with signs and symptoms of nuclear, biological, and chemical agent attacks.

The lectures offer background information about the agents. The cases provide the opportunity to apply that information through simulated patient encounters during which the participant examines, assesses, diagnoses, and treats patients who present with signs and symptoms of exposure to a weapon of mass destruction.

The course format is easy to use and allows one to navigate back and forth between the lectures and cases. A course "Status" page tracks the participant's progress through the lectures and cases, and allows you to resume cases where you left off.

…Although the course is ostensibly for trained medical professionals, while going through the course, I got the impression that all health care professionals would enjoy this course. This course can be heartily recommended to all of them…

The lectures are "spoken", i.e. you actually get to hear them. They are composed of shockwave files. Whenever you are on a topic, say, smallpox, you get a menu bar on the left side and the actual TV like area on the right. You can click on any subtopic (say "historical significance" or "clinical features") to start the lecture on that area. When you are working through the cases, you can choose from among the various differential diagnoses offered, select medicines and so on. It is thus a highly interactive course.

Post-Test

After listening to the lectures and working through all 10 cases, the participant will have access to the 50-question Post-Test for a Certificate of Completion, the 50-question Post-Test for CME, or the 20-question Post-Test for nursing CE. Each test must be completed in one sitting. Although they are an optional resource, the accompanying lectures provide background and supplemental information that will help the participant prepare for the cases.

The participant's Certificate of Completion (issued by USUHS) is awarded after achieving a passing score on the Post-Test. One can earn both the Certificate of Completion and CME or Nursing CE, but each test must be passed.

Although the course is ostensibly for trained medical professionals, while going through the course, I got the impression that all health care professionals would enjoy this course. I certainly enjoyed the course thoroughly, and hope to come back to it more often. This course can be heartily recommended to all health professionals, doctors, nurses, paramedics and medical students.

Order *This course* by Clicking Here

Request a PDF file of this review by clicking here. (If your screen resolution can not be increased, or if printing this page is giving you problems like overlapping of graphics and/or tables etc, you can take a proper printout from a pdf file. You will need an Acrobat Reader though.)

If you want to have an online course reviewed in this journal, you may want to contact the Editor-in-Chief below.