

Medical Effects of Ionizing Radiation Course
Course Schedule
Naval Undersea Medical Institute (NUMI)
Groton, CT
May 20-22, 2004

20 May 04 (Day 1)

0740 – 0800	Administrative Processing	Staff
0800 – 0810	Welcome and Introduction <i>Discuss AFRRRI's radiological program and overview of MEIR course.</i>	LTC Salter
0810 – 0840	Introduction to the Threat <i>Discuss and introduce the threat.</i>	LT Dent
0840 – 0930	“Ten Seconds That Shook the World” <i>Discuss the development of nuclear energy through the first use of nuclear weapons during wartime.</i>	Film
0935 – 1040	Physical Principles of Ionizing Radiation <i>Describe the process by which radiation interacts with matter.</i>	LT Dent
1050 - 1140	Radiation Biology <i>Describe the energies released by ionizing radiation and their effects on biological systems.</i>	COL Dickerson
1150 – 1250	Lunch	
1250 – 1420	Acute Radiation Syndrome and Trauma <i>Recall the underlying causes of radiation sickness. Explain the treatments available for persons affected by radiation sickness and treatments being developed.</i>	Col Dickerson
1420 – 1520	“Suicide Mission to Chernobyl” <i>Summarize the lessons learned since the Chernobyl accident.</i>	Film
1520 – 1530	“Discussion of Chernobyl” <i>Update on the Chernobyl accident.</i>	LTC Salter

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21 May 04 (Day 2)

0800 - 0900	<p>Psychological Factors of Ionizing Radiation <i>Describe psychological reactions of populations who are exposed to the effects of a nuclear detonation, and both real and perceived widespread radionuclide contamination.</i></p>	LTC Salter
0900 – 0950	<p>Effects and Defense of Nuclear Weapons <i>Explain the effects and hazards of blast and thermal energy and fallout characteristics released from a nuclear detonation.</i></p>	LT Dent
0955 - 1020	<p>“Pre-Hospital Response to a Radiation Accident” <i>Recall the steps taken before transporting a radiologically contaminated patient to an emergency room.</i></p>	REAC/TS Film
1025 - 1050	<p>“Emergency Department Response to a Radiation Accident” <i>Recall the steps taken from the time a contaminated patient enters a hospital emergency room until their transfer or release, including wound decontamination and protection of medical personnel.</i></p>	REAC/TS Film
1055 - 1200	<p>Low-Level (Late) Effects of Ionizing Radiation <i>Explain long-term, low-level, and chronic high-dose sub-lethal exposures of ionizing radiation.</i></p>	LTC Salter
1200 - 1300	Lunch	
1300 - 1415	<p>Management of Internal Contamination <i>List the methods for removal of internally deposited radioactive materials in the body.</i></p>	Col Dickerson
1300 - 1530	<p>Preparation Time for Group Exercise <i>Groups meet to prepare for the final exercise on the last day.</i></p>	Col Dickerson

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22 May 04 (Day 3)

0800 – 0900	Radiation Accidents <i>Discuss the effects of high levels of radiation exposure, both locally and systemically, in humans.</i>	LTC Salter
0910 – 1020	Training Exercise <i>Demonstrate the procedures for managing decontamination, radiac use, and triage situations.</i>	LT Dent
1030 – 1100	Discussion Groups Exercise <i>Explain medical management of radiological casualties.</i>	Col Dickerson
1100 – 1130	Course Summation and Critiques	Staff