

# ***Agents of Opportunity (AoO) for Terrorism:***

## ***The Emergency Medical Response to Toxic Industrial Chemicals (TICs), Toxic Industrial Materials (TIMs) and Toxic Radioactive Materials (TRMs)***

**14 hours of Continuing Medical Education (CME) credit via the Internet on your computer at home or work – no fee**

**Live Broadcast 17-18 February 2010**



**This course will originate from the Radiation Emergency Assistance Center/Training Site (REAC/TS) in Oak Ridge TN**

**The course can also be accessed without fee through Midnight (EST), Sunday, 28 February 2010. See registration information below**

**This Agents of Opportunity for Terrorism (AoO) course has been developed with support from the Office of the Director Office of Terrorism Preparedness & Emergency Response (OTPER)**

**National Center for Environmental Health / Agency for Toxic Substances & Disease Registry (NCEH/ATSDR)**

**Centers for Disease Control & Prevention (CDC).**

# The Agents of Opportunity for Terrorism course has been produced by:

The American College of Medical Toxicology (ACMT)



An Independent Professional Society of Medical Toxicologists

The Radiation Emergency Assistance Center / Training Site



REAC/TS is a program of the U.S. Department of Energy's (DOE) Oak Ridge Institute for Science & Education (ORISE). ORISE is operated for the DOE by Oak Ridge Associated Universities (ORAU), a not-for-profit Tennessee corporation.

**Accreditation:** This activity is awarded 14 American Medical Association (AMA) Physicians Recognition Award (PRA) Category 1 Credit(s)™. Physicians should claim credit commensurate with the extent of their participation in the activity. The Oak Ridge Institute for Science and Education (ORISE) is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians. The Oak Ridge Institute for Science and Education takes responsibility for the content, quality, and scientific integrity of this CME activity.

## ***Overview***

The American College of Medical Toxicology (ACMT) and the Radiation Emergency Assistance Center/Training Site (REAC/TS) are pleased to offer this 2-day awareness-level course on emergency medical response to exposures from toxic chemical and radioactive materials. The Office of the Director of the National Center for Environmental Health and the Agency for Toxic Substances & Disease Registry (NCEH/ATSDR) at the Centers for Disease Control & Prevention (CDC) has supported independent development of a 1-day Agents of Opportunity (AOO) course by the ACMT and a 1-day course in Radiation Emergency Medicine (REM) by REAC/TS.

In recent years, there has been growing concern that many of the most likely terrorist threats will involve “agents of opportunity” or materials that are readily available in most communities around the country.

***Course Objectives:*** This 2-day course is designed to familiarize participants with emergency medical response to toxic exposures. This course will provide an introduction to a variety of toxic syndromes understandable by anyone involved in planning and preparations for such incidents. The course will review the medical and psychological consequences of exposures to a variety of materials.

- Understand the concept of “agents of opportunity”
- Identify Chemical and radioactive agents of opportunity that could be used by terrorists
- Discuss the history of these agents in individual and mass exposure situations
- Describe the major health effects of TICs, TIMs and TRMs
- Identify primary methods available to treat victims
- Understand the psychological impact of mass exposures

## ***Who Should Attend***

- Physicians – Emergency, Occupational, Family Practice
- Medical Directors for the Emergency Medical Services System (EMS)
- Nurses, Nurse Practitioners, Nurse Clinicians
- Physicians' Assistants
- Students – Medicine, Nursing, PA, EMT, EMTP, Veterinary
- Pre-Hospital First Responders
- Hospital First Receivers
- Public Health Officials, Planners
- Emergency Response Coordinators
- FOXCs – Federal On-Scene Coordinators
- Environmental Health Scientists & Laboratorians
- Veterinarians
- Industrial Hygienists, Safety Professionals
- Physicists – Medical Physicists, Health Physicists, RCTs
- Radiological Technologists, Nuclear Medicine Technicians

## ***Presenters***

### **Rob Beauchamp RN BSN NREMT-P**

*REAC/TS Nurse/Paramedic*

### **Michael Beuhler MD FACMT**

*Medical Director, Carolinas Poison Control Center (PCC)*

### **Doran Christensen DO**

*REAC/TS Associate Director/Staff Physician*

### **Wm. Mark Hart RN MS CHCM EMTP**

*REAC/TS Education Coordinator*

### **Sue Holloway RT**

*REAC/TS Radiological Technologist*

### **Mark Jenkins PhD CSP**

*REAC/TS Health Physicist*

### **Mark Kirk MD FACMT**

*U.S. Department of Homeland Security (DHS)/ACMT*

### **Charles McKay MD FACMT**

*Associate Medical Director, Connecticut Poison Control Center*

### **Becky Murdock**

*REAC/TS Health Physics Technician*

### **Steve Sugarman MS CHP CHCM**

*REAC/TS Health Physics Project Manager*

### **Paul Wax MD FACMT**

*Executive Director, ACMT*

### **Albert L. Wiley MD PhD**

*REAC/TS Director*

## ***Course Specifics***

**Origination:** REAC/TS, U.S. DOE ORISE, Oak Ridge TN USA

**When:** 7:45AM EST, Wednesday & Thursday, 17 & 18 February 2010

Registration is required to obtain the link to the presentation and another link to the Participant Assessment, Course Critique and No Commercial Bias form required if credit is desired.

The course may also be accessed on the Web after 17 & 18 February 2010 for those unable to participate during the live initial presentation.

**Registration:** via the internet at <https://orise.orau.gov/reacts/registration-form.asp>

**Cost:** No charge for access to the live Web broadcast and for those wishing access prior to Midnight (EST), Sunday, 28 February 2010. The course will be available in the future (date to be announced) for a Continuing Medical Education (CME) fee of \$200.

### ***Continuing Medical Education (CME)***

**CME:** 14 hours of CME credit.

The CME credit hours are primarily for physicians, however, REAC/TS has received no reports that other licensing/certifying agencies for nurses, EMTs, *etc.*, have failed to accept these credits for other professionals.

Non-medical participants can use the CME certificate as evidence of participation. Completion of an on-line Assessment, a Course Critique and verification of Commercial Non-Bias are required as evidence of completion of the course.

CME certificate and answer key for the Assessment tool will be delivered by email after successful completion.

REAC/TS is a program of the U.S. Department of Energy's Oak Ridge Institute for Science & Education (ORISE) in Oak Ridge TN USA. The REAC/TS AoO TRMs course is based upon work performed under Contract # DE-AC05-06OR23100 between the U.S. Department of Energy and Oak Ridge Associated Universities that operates ORISE for the U.S. DOE. The ACMT is an independent professional society of medical toxicologists.

**Agents of Opportunity for Terrorism Schedule**  
**LIVE BROADCAST TIMES ARE EASTERN STANDARD TIME (EST)**

<b>Day 1 - Wednesday - 17 February 2010</b>		
7:45-8:00A	Welcome & Introductions	REAC/TS, ACMT, OTER
8:00-8:50A	Module 1 – Toxic Warfare: Looking Beyond Conventional Chemical Weapons (AoO-01)	Paul Wax MD FACMT
<b>8:50-9:00A Break</b>		
9:00-9:50A	Module 2 – The Clinical Neurotoxicology of Chemical Terrorism (AoO-02)	Mark Kirk MD FACMT
<b>9:50-10:00A Break</b>		
10:00-10:50A	Module 3 – Toxic Industrial Gases as Terrorist Threats (AoO-03)	Michael Beuhler MD FACMT
<b>10:50-11:00A Break</b>		
11:00-11:50A	Module 4 – Cyanide & Fumigants (AoO-04)	Paul Wax MD FACMT
<b>12:00-1:00P Lunch Break</b>		
1:00-1:50P	Module 5 – Chemical Contamination of Food, Water and Medication (AoO-05)	Charles McKay MD FACMT
<b>1:50-2:00P Break</b>		
2:00-2:50P	Module 6 – Terrorism by Fear and Uncertainty: Delayed Toxic Syndromes (AoO-06)	Michael Beuhler MD FACMT
<b>2:50-3:00P Break</b>		
3:00-3:50P	Module 7 – After-Event Medical Monitoring: Pros and Cons (AoO-07)	Charles McKay MD FACMT
<b>3:50-4:00P Break</b>		
4:00-4:50P	Module 8 – Observed Behaviors During Mass Chemical Exposures (AoO-08)	Mark Kirk MD FACMT
<b>5:00P Adjourn</b>		

## **Day 2 - Thursday - 18 February 2010**

7:45-8:00A	Welcome & Introductions	REAC/TS Associate Director Doran M. Christensen DO
8:00-8:50A	Module 9 – Basic Health Physics & Radiation Protection (AoO-09 = REM-01)	Steve Sugarman MS CHP
<b>8:50-9:00A Break</b>		
9:00-9:50A	Module 10 – Medical Management of the Acute Radiation Syndrome (ARS) (AoO-10 = REM-06)	Doran M. Christensen DO
<b>9:50-10:00A Break</b>		
10:00-10:50A	Module 11 – Basic Radiation Instrumentation (AoO-11 = REM-03)	Mark S. Jenkins PhD CSP
<b>10:50-11:00A Break</b>		
11:00-12:00N	Module 12 – Acute Local Radiation Injury (LRI) & Case Reviews (AoO-12 = REM-07)	Doran M. Christensen DO
<b>12:00N-1:00P Lunch Break</b>		
1:00P-1:50P	Module 13 – Common Sources of Radiation (AoO-13 = REM-04)	Steve Sugarman MS CHP
<b>1:50-2:00P Break</b>		
2:00-2:50P	Module 14 – Management of Internal Contamination with Radioactive Materials (AoO-14 = REM-08)	Doran M. Christensen DO
<b>2:50-3:00P Break</b>		
3:00-3:50P	Module 15 – Emergency Department Protocol for Management of Radiation (AoO-15 = REM-12)	Rob Beauchamp BSN RN EMTP
<b>3:50-4:00P Break</b>		
4:00-4:50P	Module 16 – Dressing Out & Decontamination (Demonstration) (AoO-16 = REM-13)	REAC/TS
4:50-5:00P	<b>Instructions - Completion of Course Critique and Participant Assessment for CME Credit</b>	<b>REAC/TS</b>