



## Objectives:

- Understand the concept of chemical and radiological agents of opportunity (AoO) – TICs, TIMs and TRMs
- Identify possible terrorist use of AoO
- Discuss past mass exposure to AoO
- Describe the major health effects of TICs, TIMs and TRMs and other important non-volatile chemical agents
- Identify primary treatment modalities for victims
- Appreciate the basis for increased public health preparedness for these agents
- Understand the psychological impact of mass casualties from such exposures
- Understand the implementation of “first receiver” OSHA guidance

## Who Should Attend:

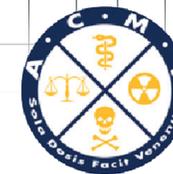
- Emergency Medicine Physicians and Residents
- Primary Care Physicians – Occupational, General Surgery, Internal Medicine, Family Practice, Others
- Medical Residents in Emergency Medicine, Family Practice, General Surgery, Internal Medicine, Others
- Medical Directors for the Emergency Medical Services (EMS) System
- Nurses, Nurse Practitioners, Nurse Clinicians
- Physician Assistants
- Medical Students, Nursing Students, and Paramedic Students
- Pre-Hospital First Responders (EMTs and Paramedics)

Produced by  
**The Radiation Emergency Assistance Center/  
 Training Site (REAC/TS)**  
 and  
**The American College of  
 Medical Toxicology (ACMT)**

Supported by:  
**The Office of Environmental Health Emergencies  
 National Center for Environmental Health / Agency for  
 Toxic Substances & Disease Registry (NCEH/ATSDR)  
 Centers for Disease Control & Prevention (CDC)**

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.

*The Oak Ridge Institute for Science and Education designates this live activity for a maximum of 14 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.*



## Free CME Course

# Agents of Opportunity for Terrorism (AoO):

**Toxic Industrial Chemicals (TICs),  
 Toxic Industrial Materials (TIMs),  
 & Toxic Radiological Materials (TRMs)**

**20-21 March 2012**

No Charge for Course, or CME Credits.  
 Following registration a link to the course materials will be provided.

**PLEASE REGISTER BY THE CLOSE OF  
 BUSINESS on FRIDAY, 9 March 2012**

Register On-Line at:  
<https://orise.ornl.gov/reacts/capabilities/continuing-medical-education/reacts-course-registration.asp>

## Course Specifics

University of California - Davis  
 MIND Institute – 1115 Auditorium  
 2825 50th Street  
 Sacramento CA 95817

T & W, 20-21 March 2012  
 Course Registration 7:30-7:45AM  
 7:45AM-5:00PM

## Overview:

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.

This 2-day course is designed to familiarize healthcare providers and others who might have a role in planning and preparations for an emergency response to toxic exposures with a variety of toxic syndromes. The course will review the medical and psychological consequences of exposures to a variety of materials.

The Radiation Emergency Assistance Center/ Training Site (REAC/TS) and the American College of Medical Toxicology (ACMT) are pleased to offer this course on emergency medical response to exposures from radioactive materials and toxic chemicals. The Office of Environmental Health Emergencies, within the National Center for Environmental Health/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.

**Link to the REAC/TS website for more complete information and registration form:**  
<https://orise.orau.gov/reacts/capabilities/continuing-medical-education/reacts-course-registration.asp>

Complete lecture hand-outs will not be provided at the course. Materials may be downloaded from the link provided after registration.

**Registration begins 21 December 2011.**

## SCHEDULE - Day 1

<b>7:30-7:45 AM</b>	<b>Course Registration</b>
<b>7:45 AM</b>	<b>Overview of the AoO Course</b>
<b>8-8:50 AM</b>	<b>Toxic Warfare: Beyond Conventional Chemical Weapons</b>
<b>9-9:50 AM</b>	<b>Clinical Neurotoxicology of Chemical Terrorism</b>
<b>10-10:50 AM</b>	<b>Toxic Gases as Terrorist Threats</b>
<b>11 AM-12N</b>	<b>Why are Cyanide &amp; Fumigants so Worrisome</b>
<b>12N</b>	<b>Lunch on your own</b>
<b>1-1:50 PM</b>	<b>Food, Water &amp; Medication as Vehicles for Toxic Terrorism</b>
<b>2-2:50 PM</b>	<b>Terrorism by Fear &amp; Uncertainty: Delayed Toxic Syndromes</b>
<b>3-3:50 PM</b>	<b>After Event Medical Monitoring: Pros &amp; Cons</b>
<b>4-5:00 PM</b>	<b>The Psychological Impact of Mass Exposures</b>
<b>5:00 PM</b>	<b>Adjourn</b>

### Presenters:

**Doran M. Christensen DO**  
*REAC/TS Associate Director/Staff Physician*

**Steve Sugarman, MS CHP CHCM**  
*REAC/TS Health Physics Project Manager*

**Carol J. Iddins MD**  
*REAC/TS Staff Physician*

## SCHEDULE - Day 2

<b>7:30-7:45 AM</b>	<b>Sign In</b>
<b>7:45 AM</b>	<b>Review of Day 1 &amp; Overview of Day 2</b>
<b>8-8:50 AM</b>	<b>Basic Ionizing Radiation Physics &amp; Radiation Protection</b>
<b>9-9:50 AM</b>	<b>Acute Radiation Syndrome (ARS)</b>
<b>10- 10:50 AM</b>	<b>Radiation Protection, Contamination Control &amp; Instrumentation</b>
<b>11-11:50 AM</b>	<b>Acute Local Radiation Injury (LRI)</b>
<b>11:50 AM-1 PM</b>	<b>Lunch on your own</b>
<b>1-1:50 PM</b>	<b>Radiation Sources &amp; Terrorist Scenarios</b>
<b>2-2:50 PM</b>	<b>Management of Internal Contamination with Radioactive Materials</b>
<b>3-3:50 PM</b>	<b>Radiation Emergency Area Protocol</b>
<b>4-4:50 PM</b>	<b>Dressing Out &amp; Decontamination</b>
<b>4:50-5 PM</b>	<b>Course Close Out, Q&amp;A, Adjourn</b>

**Paul Wax MD, FACMT, FACEP**  
*University of Texas, Southwestern/ACMT*

**Charles McKay MD, FACMT, FACEP**  
*Connecticut Poison Control Center/ACMT*

**Adam Pomerleau MD**  
*Emory University/ACMT*

**G. Patrick Daubert MD, FACEP**  
*Kaiser Permanente, South Sacramento Medical Center/ACMT*

**Ziad Kazzi MD, FAAEM, FACEP**  
*Emory University/ACMT*