

DRAFT PROGRAM AGENDA

Day 1 – May 5, 2006

Chemical Agents of Opportunity for Terrorism: The Medical and Psychological Consequences of TICs (Toxic Industrial Chemicals) and TIMs (Toxic Industrial Materials)

8:30 - 9:15 AM Toxic Warfare: Looking Beyond Conventional Chemical Weapons

While the threat of conventional chemical warfare has received much attention, and is the subject of tight control measures and a program of planned chemical destruction, less interest has been paid to other chemical agents that have great potential to wreak havoc on the civilian sector and produce mass casualties. This talk will provide an overview of toxic warfare, TICs and TIMs, and key lessons from history.

9:15 – 10:00 AM The Clinical Neurotoxicology of Chemical Terrorism

The awesome complexity of the central nervous system makes it particularly vulnerable to poisons. This lecture will provide insight into the expected clinical effects of potential terroristic poisons by highlighting three distinct brain syndromes: psychedelia (hallucinations), sedation (coma) and seizures (convulsions).

10:00 – 10:15 AM Break

10:15 – 11:00 AM Toxic Gases in your Community

Chemical compounds are produced in massive quantities as part of America's industrial complex. Many of these compounds are amenable to use as large scale terrorist weapons. This talk will address a number of chemicals, such as phosgene, chlorine, and anhydrous ammonia, which might be disseminated as inhalational threats. Their pathophysiology, treatment, and potential sources in the community and in the transportation system will be discussed.

11:00 – 11:45 AM Why Are Cyanide and Fumigants So Worrisome

Of the numerous poisons that impair mitochondrial function, cyanide is probably the most likely to be used in a chemical terrorism event, given its availability and the ease with which hydrogen cyanide gas can be generated. Cyanide and fumigants such as methyl bromide, sulfuryl fluoride, chloropicrin and the phosphides are among the most toxic TICs. This lecture will provide an overview of mechanism of action, metabolism, clinical presentation and medical management, including antidote utilization.

11:45 – 1:00 PM Lunch Break (on your own)

1:00 – 1:45 PM Recognizing Current Vulnerabilities: Threats to the Water and Food Supply

Much concern has been raised about the safety of our nations drinking water. This presentation will explore the potential threat of chemical terrorism through our water supply.

1:45 – 2:30 AM Recognizing Current Vulnerabilities: Threats to Food, and Drug Supplies

This presentation will discuss the vulnerability of the food and drug supply as a vehicle for chemical terrorism. Recent mass poisonings involving nicotine in food, and contamination of illicit drug supply will be discussed. The potential problems relating to counterfeit pharmaceuticals will also be explored.

2:30 – 2:45 PM Break

2:45 – 3:30 PM Terrorism by Fear and Uncertainty: Delayed Toxic Syndromes

Previous experience in medical toxicology provides notable examples in which malice or mishap has resulted in widely publicized episodes of group or mass poisoning whose presentation was delayed. The toxicity of metals such as thallium and the organomercurials, and of halogenated hydrocarbons such as dioxins and PCBs, will be discussed with particular reference to how poisoning with these agents presents and why delay in symptom onset complicates response to potential incidents of toxic terrorism.

3:30 – 4:15 PM The Psychological Impact of Mass Chemical Exposures

It is often difficult to differentiate psychological harm caused by chemical or biological terrorism from other illnesses. Previous events demonstrate that large numbers of patients with psychological distress will impact the emergency response and potentially overwhelm the health care system. Strategies must be developed to diminish fear and hopefully decrease subsequent mass psychogenic illness that is likely to occur following a mass chemical exposure.

DRAFT PROGRAM AGENDA

Day 2 – May 6, 2006

- 9:00 am – 9:15 am Recap of Day 1
- 9:15 am – 10:15 am Attacks on Chemical Facilities
- 10:15 am – 10:30 am Break
- 10:30 am – 11:30 am Threat Assessment for Chemical Attacks
- 11:30 am – 12:30 pm OES: SEMS/NIMS Briefing
- 12:30 pm – 1:30 pm Lunch Break (on your own)
- 1:30 pm – 3:45 pm Simulation/Exercise
- 3:45 pm – 4:00 pm Break
- 4:00 pm – 4:30 pm Wrap Up