HEARING CHARTER

Radiological Response: Assessing Environmental and Clinical Laboratory Capabilities

Thursday, October 25, 2007
9:30 a.m. – 12:00 p.m.
2318 Rayburn House Office Building

Purpose

Every two years the government conducts the TOPOFF series of national counter-terrorism exercises, mandated by Congress. This year, TOPOFF IV (T4) is taking place from October 14-24, 2007, and will focus on National Planning Scenario #11, which envisions the detonation of a Radiological Dispersal Device (RDD) or "dirty bomb." In this exercise, involving thousands of federal, state and local officials and sponsored by the Department of Homeland Security (DHS), terrorists detonate an RDD in Guam, Portland, Oregon and Phoenix, Arizona. The exercise will test the handling and flow of operational and time-critical intelligence between agencies and the existing procedures and policies for domestic incident management of a major radiological event.

One of the key assumptions in the National Planning Scenario developed by the White House's Homeland Security Council and being exercised in TOPOFF IV is that all potentially exposed individuals (an estimated 100,000 people at each site) will be tested for radiological exposure and/or contamination and that a valid method exists for testing these clinical specimens. Yet, validated methods to test clinical specimens in a radiological emergency exist for only six of the 13 highest priority radioisotopes most likely to be used in a terrorist scenario. For those isotopes for which "validated" methods do exist screening 100,000 individual clinical specimens in the wake of a radiological attack could take more than *four years* to complete due to the current shortfall in radiochemistry laboratories, personnel and equipment. Environmental sampling could take as long as *six years* to complete given the current capacity and capabilities of the U.S. radiochemistry laboratory infrastructure.

Although not a focus of the TOPOFF IV exercise, in any real world event the critical lack of a sufficient environmental and clinical radiochemistry laboratory capacity will delay appropriate public health care actions and plans, increase public panic, degrade public trust in government officials and increase the economic losses due to delays in assessment and cleanup. The subcommittee hearing on radiological response will review what steps are underway to address this critical need, what technologies or resources would help tackle this capacity gap and what federal agencies responsible for addressing this need have learned from actual radiological emergencies, such as the recent Polonium-210 poisoning in London that killed former Russian KGB agent Vladimir Litvinenko last November and the 1987 (accidental) radiological release in Goiania, Brazil, that killed four people and injured hundreds. It will also examine why this crucial

public health ability has received limited attention and what more needs to be done to improve the U.S. radiochemistry laboratory infrastructure.

Witnesses

Dr. Randolph Long, Chair of the Integrated Consortium of Laboratory Networks (ICLN) Network Coordinating Group and Chief Technical Adviser, Chemical and Biological Division, Science and Technology Directorate, Department of Homeland Security.

Dr. Robert L. Jones, Chief, Inorganic Toxicology and Radionuclide Labs, Centers for Disease Control and Prevention. He is also the Co-Chair of the Integrated Consortium of Laboratory Networks (ICLN) Network Coordinating Group's Radiological Laboratory Response Workgroup and headed up the CDC's Polonium-210 response efforts last year.

Dr. Robert T. "Robb" Hadley, Lawrence Livermore National Laboratory, Department of Energy. Dr. Hadley is the current Chair of the Federal Radiological Monitoring and Assessment Center's (FRMAC) Laboratory Analysis Working Group and was formerly the Chair of the FRMAC Health & Safety Working Group.

Dr. John Griggs, Chief, Monitoring and Analytical Services Branch, U.S. Environmental Protection Agency, Office of Radiation and Indoor Air, National Air and Radiation Environmental Laboratory (NAREL) and Co-Chair of the ICLN Network Coordinating Group's Radiological Laboratory Response Workgroup.

Ms. Dana Tulis, Deputy Director, Office of Emergency Management (OEM), Environmental Protection Agency (EPA).