

Opening Statement
The Honorable Jim Sensenbrenner (R-WI)
Ranking Member
Subcommittee on Investigations and Oversight

“Radiological Response: Assessing Environmental and Clinical Laboratory Capabilities”

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The potential for radiological accidents or attacks is a reality we need to prepare for. In a June 2005, The Department of Homeland Security (DHS) released a Technology Assessment and Roadmap for the *Emergency Radiation Dose Assessment Program* (Known as ERDAP). Two years ago, the assessment found that:

Tools to rapidly triage individuals needing medical attention and to intelligently direct medical treatment to those needing immediate care will optimize the use of scarce resources, improve survival, and enhance public confidence in government.

Today, these tools still do not exist. Following a radiological incident, there is a critical need to determine who has been affected and to what degree. Rapid radiological dose assessment is critical for determining who needs treatment and what treatment is needed. As ERDAP found, “lives may be saved if we can develop rapid dose assessment and can implement earlier treatment.”

Despite this critical need, we are still suffering from a clear technology gap. Validated methods for testing in a radiological emergency exist for only 6 of the CDC’s 13 highest priority radioisotopes most likely to be used in a terrorist scenario. And for those isotopes where screening methods do exist, screening the number of individuals likely to be exposed in a terrorist attack could take years.

Real world radiological incidents should be instructive. The most recent example was the polonium-210 poisoning in London that killed KGB agent Vladimir Litvinenko. The CDC estimated that 160 Americans were potential exposed to radiation. When it attempted to test these individuals it found that there was only one laboratory in the country capable of carrying out the test and it only had the capacity to test a handful of people per day.

A radiological incident in an urban area could result in much greater exposure. In 1987, in Goiania, Brazil, a small source of cesium-137 was stolen from an abandoned radiotherapy institute. By the time the material was recognized as dangerous 15 days later, 4 people were dead and hundreds were injured by internal contamination. Over 100,000 people had to be examined for radiological contamination, topsoil had to be removed from several sites, and several houses were demolished.

Neither of these incidents originated with an intentional effort to spread contamination. The scale of an actual radiological attack would likely be greater still.

In its report titled, *Creation of a National Radioanalytical Laboratory Response Network*, the Integrated Consortium of Laboratory Networks (ICLN) workgroup found that, in the case of a radiological dispersion device, or dirty bomb, in an urban district, 350,000 environmental samples would need to be collected over 12 months and more than 100,000 clinical samples would need to be collected, analyzed, and processed within the first few days. Not only did the workgroup identify a lack of capacity to deal with this volume, it also highlighted a lack of competency due to: a lack of laboratory analytical methods specific for emergency response needs, reduction in radiochemistry expertise due to retirements, lack of formal training programs for radioanalytical labs, and reduction in federal radiological proficiency testing programs.

We no longer have the luxury to not maintain this capacity. I look forward to hearing from today's witnesses about how these capacity and competency gaps can be addressed.