

**Leonard A. Cole, PhD
Director, Program on Terror Medicine and Security
University of Medicine and Dentistry of New Jersey, Newark, NJ***

**Before the Committee on Homeland Security
Subcommittee on Counterterrorism and Intelligence
U.S. House of Representatives
Hearing on Counterterrorism Efforts to Combat a Chemical,
Biological, Radiological, and Nuclear (CBRN) Attack on the Homeland
April 25, 2013**

Chairman King, Ranking Member Higgins, former Chairman Meehan, distinguished members of the Subcommittee, thank you for inviting me again to speak on the CBRN threat to the homeland. I thank as well the full Committee's Chairman McCaul and Ranking Member Thompson for their leadership on homeland security. The bombings at the Boston marathon ten days ago, and the subsequent letters containing ricin mailed to President Obama and Senator Wicker, have consumed our nation's attention. They underscore the vital importance of addressing the terrorist threat in general and the CBRN threat in particular.

Last November, I was privileged to review with this Subcommittee the paper titled *WMD Terrorism*, which I co-edited with Randall Larsen on behalf of the Aspen Institute's Homeland Security WMD Working Group. (WMD—Weapons of Mass Destruction—is a term equivalent to CBRN.) The Aspen working group, under the direction of Clark Ervin, provided an update on recommendations made in 2008 by the bipartisan Commission on the Prevention of Weapons of Mass Destruction Proliferation and Terrorism (WMD Commission).

Among the Aspen paper's proposed actions was a call for reauthorization of the Pandemic and All-Hazards Preparedness Act (PAHPO). I am pleased to note that last month, after passage by both houses of congress, President Obama signed the act into law. The act provides funding for numerous protective measures including reinforcing the Strategic National Stockpile, which contains medicines and equipment appropriate to CBRN threats. The stated goal is to deliver items from the stockpile anywhere in the United States within 12 hours. Just weeks ago, defenses against smallpox were strengthened with the introduction into the stockpile of a novel antiviral drug, Arestvyr (though with questions by some about the drug's cost).

Another of our paper's proposals was to advance public-private collaboration toward enhancing medical response capabilities. Again, last month, a consortium of public-private-academic institutions announced the establishment of a major new influenza vaccine development facility at Texas A&M University. The consortium is one of three Centers for Innovation introduced by the US Department of Health and Human Services in mid-2012. The centers were established to develop and hasten the availability of medical countermeasures such as antibiotics and antidotes for biological, chemical, and radiological threat agents.

Welcome as these actions have been, other protective needs remain inadequately addressed. At last November's hearing, Congressman Pascrell voiced misgivings about the absence of a special assistant for biodefense who would report directly to the president. This lapse continues, as do other weaknesses in our biodefense structure including the lack of uniform security requirements for laboratories that work on select biological threat agents.

CBRN threats have also been heightened by recent international events. Allegations that chemical weapons were used in Syria either by its government or by opposition forces remain unresolved. In any case, worries persist that in the midst of the civil war there, Syrian chemical agents could fall into the hands of terrorists. Nuclear proliferation also remains worrisome, especially because of Iran's failure to curb its apparent efforts to acquire nuclear arms. Nuclear concerns were further escalated last month when North Korea threatened to target the US with nuclear weapons.

Every effort should be made to reduce these threats. But they also signal the need for improved readiness in the event of a nuclear detonation on American soil. In this regard the Aspen paper called attention to a valuable initiative by the Center for Biosecurity called "Rad Resilient City." Other protective measures against high-level radiation exposure should also be explored. For example, the new field of terror medicine might include the stockpiling in blood banks of umbilical cord blood. Rich in stem cells, this blood could help seed production of people's blood cells whose natural production had been damaged by the radiation exposure. (This storage plan has long been advocated by the University of Medicine and Dentistry's Dr. Norman Ende and Dr. Kenneth Swan.)

For all these reasons, coupled with the fact that al Qaeda and other terrorist groups have sought to acquire weapons of mass destruction, I am grateful that this Subcommittee is focused on enhancing America's preparedness and response capabilities for a possible CBRN attack.

.....

*Unless otherwise indicated the views expressed here are my own and not representative of any institution.