



Statement before the Committee on Homeland Security

Subcommittee on Emergency Preparedness, Response, and Communications

“Strategic Perspectives on the Bioterrorism Threat”

Former Senator Jim Talent

Co-Chair with former Senator Bob Graham of the Commission on the Prevention of
Weapons of Mass Destruction Proliferation and Terrorism, 2008-2010

Senior Fellow at the American Enterprise Institute

April 22, 2015

*The views expressed in this testimony are those of the author alone and do not necessarily represent those of the
American Enterprise Institute.*

Madame Chairman, Ranking Member Payne, and Members of the Subcommittee,

It's a pleasure for me to appear before you today, and quite encouraging to me personally that you are holding a hearing on this subject. Congress cannot pay too much attention to the fact that we live in an era of information technology which has, unfortunately, greatly increased the danger to the United States and the world of asymmetric weapons: weapons which have a destructive potential that is highly disproportionate to the power and resources it requires to develop and deploy them. Of the asymmetric dangers we face, the threat of a bio-attack is, in my judgment, one of the greatest and gravest.

I will address that subject later in my testimony. First I want to describe how I came to be familiar with this issue.

One of the recommendations of the 9-11 Commission was that Congress focus on the danger of weapons of mass destruction proliferating to terrorist groups. So in 2007 Congress created a Commission to study the danger and report on measures that could be taken to minimize it. I was asked to co-chair the Commission with Senator Bob Graham of Florida. There were a total of nine members on our bi-partisan Commission.

Shortly after our Commission was formed, we met with Senator Harry Reid at his request. Senator Reid explained his interest in the subject of our work, and encouraged us to highlight clearly those aspects of the WMD terrorism threat which we believed were the most significant; he urged us in the strongest terms to tell us what we thought Congress most needed to know about the danger. We did so in a Report released at the end of 2008 called "*World at Risk*."

Early in our deliberations, Senator Graham and I decided to focus on the threat posed by nuclear and biological weapons, and if anything to give the bio-threat greater emphasis. There were two primary reasons for that:

First, we knew that the terrorists had pursued bio-weapons in the past. Former CIA Director George Tenet noted in his memoir that in connection with their planning of the 9-11 attacks, al Qaeda launched a concerted effort to obtain and weaponize anthrax to use in a mass attack. They set up a biological laboratory for that purpose in Afghanistan and hired Yazid Sufaat, a former Malaysian Army officer who had been trained in microbiology at California State University, Sacramento. Fortunately, their efforts were derailed by the American invasion of Afghanistan, but the record showed that they were aware of the potential of bio-weapons for their purposes. Others such as al Qaeda of the Arabian Peninsula (AQAP) have expressed similar intent.

Second, we judged that it was probably easier for them to secure a bio-weapon than a nuclear weapon. Before the information revolution, it required the resources of a nation state to develop and deliver a bio-weapon. But the tremendous advances in life science over the last few decades, which have done so much to advance the quality of human life, have had the ironic side effect of reducing the barriers to developing a bio-weapon. Disease causing microbes – anthrax is an example -- are readily available in nature, or they

can be acquired from a sick person. A skilled biologist, with a laboratory costing no more than several hundred thousand dollars, is capable of isolating and weaponizing a particularly deadly form of such a microbe. As we said in our Report,

“We accept the validity of current intelligence estimates about the current rudimentary nature of terrorist capabilities in the area of biological weapons but caution that the terrorists are trying to upgrade their capabilities and could do so by recruiting skilled scientists. In this regard, the biological threat is greater than the nuclear; the acquisition of deadly pathogens, and their weaponization and dissemination in aerosol form, would entail fewer technical hurdles than the theft of production of weapons-grade uranium or plutonium and its assembly into an improvised nuclear device. “

There are other secondary but nevertheless significant reasons why bio-weapons might be even more attractive than nuclear weapons to terrorist groups. Such weapons are relatively easy to transport without detection; they can cause as many or more deaths than a tactical nuclear weapon; they can be more easily stockpiled, making it possible to hit several targets in succession; and – depending on the biological agent used – it is entirely possible that terrorists could launch such an attack and escape the area before the authorities even knew that an attack had occurred. The symptoms of anthrax (and many other diseases capable of being used as bio-weapons), do not manifest for several days after exposure and can easily, in the early stages, be mistaken for influenza and other naturally-occurring diseases.

The aim of the terrorists is not just to kill, but to create as much fear as possible. As we saw last year during the Ebola outbreak, societies are susceptible to panic over even natural epidemics. The Subcommittee can well imagine the effect in a large city if large numbers of people became ill or died because terrorists had weaponized a deadly pathogen and spread it through urban neighborhoods or in the transportation system. The Department of Homeland Security, Office of Science & Technology has modeled the effects of a potential anthrax attack on a city like New York; I invite the Subcommittee’s attention to their conclusions.

So we knew the terrorists had the motivation to get biological weapons, and we were quite concerned that advances in life sciences would bring development of such weapons increasingly within their capabilities. I was particularly influenced by Senator Graham’s opinion in this regard; as a former Intelligence Committee Chairman, he had and has extensive experience with how the terrorists think and plan. Even though most of the Commission members were experts primarily in nuclear proliferation, they fully agreed to highlight the bio-threat and put our recommendations in that regard first in the Report.

Of course we did not devalue the danger of nuclear proliferation to terrorists; it is a real threat, and our Report made a number of recommendations for minimizing it.

After we released “World at Risk”, the bipartisan Congressional leadership extended the life of our Commission and asked us specifically to report on the status of our recommendations and, more generally, the extent and effectiveness of our government’s

efforts to prevent and/or prepare a WMD terrorist attack. We issued a second Report in January 2010 in the form of a report card. We gave a range of grades, some of them quite high; but in the crucial area of preparedness to respond to a bio-attack, we gave the government an “F”.

Preparedness for a biological attack, or for that matter a naturally occurring epidemic, means having a well-developed infrastructure which can

- detect and diagnose a biological event,
- communicate effectively and in real time the nature and spread of disease,
- stockpile and distribute medical countermeasures,
- treat large numbers of afflicted people, and
- (where necessary) remediate the environment in areas that have been exposed.

During our final meeting, the commissioners encouraged Senator Graham and me to continue our work as a not-for-profit organization. Along with our executive director at the WMD Commission, Randy Larsen, we created the Bipartisan WMD Terrorism Research Center (WMD Center). We also brought in Lynne Kidder, who was (and still is) a co-chair of the Institute of Medicine’s Forum on Medical and Public Health Preparedness for Catastrophic Events.

Senator Graham and I decided that the most helpful project for the WMD Center would be a thorough, end to end assessment of the country’s state of preparedness for a major biological event, either natural or because of an attack. No government or private organization had ever accomplished such an assessment.

We recruited a distinguished group of 11 senior advisors including: the former Deputy Commissioner of FDA, the Director of the American Medical Association’s Center for Disaster Medicine and Emergency Response, a former Special Assistant to the President for Biodefense in both the Clinton and Bush (43) Administrations, a retired Major General who had led medical countermeasure development for DoD, the Vice President and Director of RAND Health, and the former Chief Legal Advisor to the Centers for Disease Control and Prevention.

These senior advisors wrote the questions that needed to be answered to determine America’s preparedness for bio-response. A separate consulting team of subject matter experts then did extensive research to answer these questions.

Senator Graham and I and our staff at the WMD Center used this information to assign the grades.

A copy of the Report Card has been distributed to the Subcommittee and staff. I invite your attention to our findings. Though I will not attempt to detail all of them here, I want to make a general observation and then comment on several of the findings which in my view are the most important.

While every effort should be made to prevent a bio-attack, we cannot plan on the assumption that those efforts will be successful forever. The struggle against terrorism is long term, and as long as it lasts, there is a good chance, for the reasons I've noted, that at least some of the terrorist groups will continue to try to acquire and deploy a bioweapon. Our first Report noted that they may well be successful. The efforts we make now to prepare will be crucial to limiting the impact of such an attack; with a swift and effective response, the loss of life and collateral effects can be drastically reduced.

Of course any loss of life because of a bio-attack would be tragic. But the better hardened we are, the more likely it is that a bio-attack will not be a weapon of *mass* destruction, and the less likely it is that the terrorists will choose to use it. In other words, preparedness can be a form of prevention. This is a point Senator Graham has often made, and rightly so. We may actually be able to deter such an attack if it is clear that we are as prepared as possible to respond to it.

I want to note several specific aspects of the WMD Commission Report Card (January, 2010) and the WMD Center Report Card (October, 2011)

First and foremost, the lack of sufficient medical countermeasures (MCMs) in our Strategic Nation Stockpile (SNS), and the lack of a system to quickly develop and produce MCMs during a crisis was our number one concern in 2011 and remains so today. This is a complex problem with many key elements: basic science (NIH), advanced development (BARDA), and regulatory science (FDA). As we said in the WMD Center Report Card, "A bio-response enterprise without adequate medical countermeasure is like an Army without bullets—it may look good on a parade ground, but has minimal value for national security."

The recent Ebola virus outbreak highlighted that unless countermeasures are immediately available, including diagnostics tests that can be used by clinicians who are evaluating suspected cases, therapeutics to treat cases and vaccines to protect health care workers and others at risk, we are left with fairly primitive means to respond to and contain such events.

The challenge is not unmanageable. The list of bio-threat agents for which we should have a diagnostics tests, therapeutics and vaccines for is about a dozen. To date, our stockpile contains countermeasures for only three or four. The entity in the U.S. Government responsible for developing and producing these countermeasures, the Biomedical Advanced Research and Development Authority (BARDA) at the Department of Health and Human Services has been chronically underfunded. Originally authorized by Congress in 2006 to receive about a \$1 billion annually, it has received one quarter to half of that amount. As we witnessed with the Ebola outbreak, it is too late to develop countermeasures after an outbreak or attack has happened.

There have been some bright spots and progress. Thanks to the efforts of Dr. Luciana Borio at FDA, we have made significant progress in regulatory science since 2011, some of which was seen in the Ebola response last year when new diagnostics were approved by FDA in a matter of days. We have also seen a shift in strategy regarding MCMs in a move

away from “one-bug, one-drug” to a more flexible, rapid response. However, as we noted in the WMD Commission Report, if we continue to fund BARDA at a fraction of its actual requirements, we cannot expect to dig ourselves out of this preparedness hole.

Second, at the time of our WMD Center Report Card, we had no reliable means to dispense the countermeasures quickly. A number of cities had experimented with various distribution systems, but the process was not national and was not moving quickly enough. This is a shortfall I find particularly worrisome; the prospect of what will happen if there is an attack, and our people know there are countermeasures but can’t get access to them. This is an essential, underappreciated and under-valued element of a response. We may be confronted with a situation where we have countermeasures but can’t get them to the people who need them, when they need them.

Third, our Report Card noted that there had been some significant progress in improving the public health infrastructure in the various states, though our overall evaluation was that the medical system was not capable of managing the surge in demand that would be created by a major biological event. At the time we issued our Report Card, the budgetary stresses of the federal government were just beginning to take their toll on the public health system, particularly at the state and local level. I fear that funding reductions since then have undermined such progress as had been made at the time we were writing.

Finally, there are significant shortfalls in how both the Executive and Legislative branches are organized to deal with this issue. Today there are more than two dozen Presidentially-Appointed, Senate-Confirmed individuals with some responsibility for bio-defense, but none of them has bio-defense for a full-time job and no one is in charge. This virtually guarantees a fragmented response. The Administration appointed a WMD Coordinator, to oversee the general WMD proliferation issue; that was an improvement. But since the departure of Elizabeth Sherwood Randall from the NSC to become the Deputy Secretary of Energy, that position has remained vacant. Ideally, there should be a Special Assistant to the President devoted full time to the bio-threat (both man-made and naturally-occurring), as existed during the both the Clinton and Bush (43) administrations.

The Congressional oversight structure is also far too fragmented. Again, a number of Committees have responsibility for pieces of the effort. It’s difficult even to determine exactly how many Committees and Subcommittees are involved. Senator Graham and I are both well aware of the difficulties inherent in restructuring and unifying Congressional oversight. But we also know the vital contribution Congress can make in this area, if it is organized in a way that allows the full weight of Congressional influence to be brought to bear. It would be well worth a major effort by the bipartisan Leadership, joined by Chairs and Ranking Members, to unify oversight to just a few Committees with clearly defined areas of authority.

A more unified chain of command within Congress and the Executive Branch would allow the development of relationships and expertise over time, and a more strategic approach by the top level political authorities, that Senator Graham and I believed essential to the success of this vital effort.

A final word. Our Report card was issue 3 1/2 years ago. Some of our findings may be outdated, though given the problems I have noted above, I fear that in most areas our preparedness has declined rather than improved. In any case, the questions we developed, and asked, are still the right questions for you to ask as you do your vital work in this area. That was one of our purposes in doing the Report Card: to give decision makers tools for understanding the global state of our preparedness to respond to a biological event. I urge the Subcommittee to continue its emphasis on the urgency of this danger, and to use the questions we asked as a starting point for understand what must be done.