

COUNTERTERRORISM EFFORTS TO COMBAT A  
CHEMICAL, BIOLOGICAL, RADIOLOGICAL, AND  
NUCLEAR (CBRN) ATTACK ON THE HOMELAND

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HEARING

BEFORE THE

SUBCOMMITTEE ON  
COUNTERTERRORISM  
AND INTELLIGENCE

OF THE

COMMITTEE ON HOMELAND SECURITY  
HOUSE OF REPRESENTATIVES

ONE HUNDRED THIRTEENTH CONGRESS

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**COUNTERTERRORISM EFFORTS TO COMBAT  
A CHEMICAL, BIOLOGICAL, RADIOLOGICAL,  
AND NUCLEAR (CBRN) ATTACK ON THE  
HOMELAND**

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**Thursday, April 25, 2013**

U.S. HOUSE OF REPRESENTATIVES,  
COMMITTEE ON HOMELAND SECURITY,  
SUBCOMMITTEE ON COUNTERTERRORISM AND INTELLIGENCE,  
*Washington, DC.*

The subcommittee met, pursuant to call, at 10:08 a.m., in Room 311, Cannon House Office Building, Hon. Peter T. King [Chairman of the subcommittee] presiding.

Present: Representatives King, Higgins, and Keating.

Also present: Representative Green.

Mr. KING. Good morning. The Committee on Homeland Security Subcommittee on Counterterrorism and Intelligence will come to order. The subcommittee is meeting today to hear testimony examining a threat of weapons of mass destruction attacks on the homeland and to review Federal, State, and local governments' capabilities to detect and respond to such attacks.

I now recognize myself for an opening statement.

Let me just say at the outset that this hearing was scheduled a while back. It has been postponed at least once, and I thank the witnesses today for their forbearance and being willing to work with us on scheduling a new date.

Obviously at the time this was originally scheduled we did not know that the attack in Boston was going to occur, and to me, it makes today's hearing all the more meaningful even though it is not focused on that in particular. I am sure that the Chairman of the committee is going to schedule inquiries into the Boston matter. But I think today certainly can relate to Boston and it shows the various elements and the scope of the type of attacks that we have to constantly be on our guard against when we are dealing with international jihad.

So with that, I want to welcome our distinguished witnesses for this hearing.

It really is an appropriate hearing to kick off the subcommittee's activity for the 113th Congress. I am looking forward to working with Members of the subcommittee, especially the Ranking Member, Mr. Higgins, who is a colleague from New York and a friend, to examine current and emerging threats, ensure that all necessary efforts are made to detect and respond to a terrorist attack, and

conduct oversight over intelligence and information sharing at all levels of government.

I can speak for myself, and I am certain for the Ranking Member as well, this subcommittee will be run in a bipartisan way with, again, working to the extent we possibly can to address this issue, which—the issue of terrorism, which affects us whether we are Democrat or Republican, north or south, but particularly in New York, where we had a situation last week with the announcement of the plot by the Royal Canadian Mounted Police, which would have affected residents from New York going through Buffalo, of course, the Canadian border, where Mr. Higgins represents, and a terrible loss of human life.

So we are all in this together, and that, I think, is going to be the premise that guides our subcommittee as we go forward.

Now, last week the attacks in Boston, which killed three people and wounded more than 80, were, as I said, a tragic reminder of the continued terrorist threat facing the homeland. Hopefully this will be a wake-up call to all Americans, particularly to Members of Congress, who somehow feel that the war on terrorism is over and that homeland security funding is a target to be cut when, in fact, to me, the threat is as great as it ever was; a different dimension to the threat, but in many ways even more dangerous than before September 11.

The unfortunate reality is that by using on-line instructions from *Inspire* magazine terrorists were able to construct lethal improvised explosive devices, and that, also, does not even reference any training they may have had overseas.

While this hearing is not focused on the Boston attack specifically, we have to ask what the possibility is for terrorists to acquire chemical, biological, radiological, or nuclear materials and then use those combined with an improvised explosive device, an IED. We have to ask what our intelligence and response capabilities look like in that event. When you think of the carnage that was caused and how in many ways a country, and certainly a city, came to a halt for 4 days just with two devices—two IEDs left behind—we can just imagine the consequences if that had been a radiological or nuclear or dirty bomb attack.

Now, we don't have to look far to see that the WMD threat is real. We saw that Korea has certainly made threats against the United States; we had Kim Jong-un posing with a chart entitled "U.S. Mainland Strike Targeting Major American Cities."

Iran's Ahmadinejad threatens that a world without America is both desirable and achievable. While their missiles cannot yet reach our shores, and while Tehran works vigorously to produce nuclear arms, it still hasn't succeeded. But we have to assume the day will come when they will.

Ten years ago al-Qaeda sought and received an Islamic religious ruling authorizing the use of weapons of mass destruction against infidels. Al-Qaeda has sought nuclear weapons for 20 years. In the past 6 years terrorists have launched several attacks on facilities housing Pakistan's several dozen nuclear weapons.

A nuclear event in any U.S. city would be a catastrophe. For instance, it is estimated that a ground burst of a 150-kiloton device at the base of the Empire State Building in an unevacuated Man-

hattan at noon on a workday in good weather would ultimately kill or wound more than 1.5 million innocent people.

That is why President Obama stated that the single biggest threat to U.S. security, both short-term, medium-term, and long-term, would be the possibility of a terrorist organization obtaining a nuclear weapon. Al-Qaeda is “trying to secure a nuclear weapon—a weapon of mass destruction that they have no compunction at using,” and that is a quote from President Obama.

An attack using a less sophisticated radiological dispersion device, often called a dirty bomb, would be less deadly than a nuclear blast but it still would involve the loss of human life and would have incalculable economic, environmental, and psychological impacts on our Nation.

Our first line of defense against rogue states’ or terror groups’ weapons of mass destruction are the counterproliferation and counterterrorism efforts of our intelligence community and Federal law enforcement. Our next line of defense is our Nation’s military defense forces and nuclear deterrent.

Our last line of defense is with us here today—the front line defenders responsible for intercepting a nuclear bomb. They are the Department of Homeland Security’s Domestic Nuclear Detection Office and local police, represented, I am proud to say, today by Commissioner Daddario of the New York City Police Department, which has 1,000 police officers working day in and day out on counterterrorism.

The NYPD participates in the DHS’s vital Securing the Cities program, which has provided 8,500 radiological detectors, trained 13,000 police officers, and conducted 100 drills. Last year DHS wisely expanded Security the Cities to another at-risk city, Los Angeles.

Commissioner Daddario, I should say, the program has come a long way, though. I remember the first time, when it was first being rolled out and they had it—they were testing it on the border between Nassau County and Queens County on Sunrise Highway, and the first guy that was stopped was some poor guy coming back from a stress test and he got pulled over and he said—I see you nodding—he said, “The doctor said my heart is in good shape but I am going to have a heart attack right now.” So many lights were going off, helicopters were moving, it was—we thought we had our first nuclear terrorist but instead it was just some poor guy who was filled with radiation.

But in any event, it has come a long way since then and is really, I think, absolutely essential to the security of the city because, similar to what happened in London and Madrid, it is believed that the next threat against a major city will be launched from the suburbs. As bad as that would be, if we have a dirty bomb it would be that much worse. That is why I think Secure the Cities program, which has worked so well in New York, but I think it is transferable to virtually any other urban area in the country.

At today’s hearing we will examine the threat of a chemical, biological, nuclear, or radiological attack on the homeland; review Federal, State, and local governments detect and respond to such attacks; and identify opportunities for information-sharing—again, always with the backdrop of Boston, which again, if anything posi-

tive comes from it it is a reminder of how real the threat is and how whatever we discuss, again, thinking how bad that was, how much worse it could have been if it had been any of these nuclear or radiological devices.

In closing, I want to commend the Obama administration for its firm line against North Korea. Republican or Democrat, we all stand shoulder to shoulder with our South Korean and Japanese allies against any aggression. I also commend the administration for its continuation and expansion of Securing the Cities program.

I now look forward to the testimony of the witnesses, and—but first I want to recognize, again, a good friend, an outstanding Member of Congress from upstate New York, which sometimes we refer to as Southern Canada, gentleman from New York and Ranking Member, Mr. Higgins.

Mr. HIGGINS. Thank you, Mr. Chairman, for holding this hearing, and look forward to working with you toward our mutual objectives of protecting the homeland and strengthening America's influence abroad.

I would also like to thank the witnesses for their testimony.

Let me also publicly thank the FBI, Joint Terrorism Task Force, the Department of Homeland Security, and State and local officials for their efforts in apprehending a suspect in the Boston marathon bombing. Their efforts exemplify the type of collaboration that we envision when State, local, and Federal agencies work effectively together.

On Monday, as the Chairman has mentioned, the Royal Canadian Mounted Police announced that they, along with the FBI and Department of Homeland Security, disrupted a terrorist plot to attack a commuter train that runs from Toronto through the Northern Border at Niagara Falls into New York City. The individuals charged allegedly received support from al-Qaeda in Iran.

Now, some were surprised that al-Qaeda had a presence in Iran. Al-Qaeda is a Sunni organization in a Shia-majority country, but we should remember that when the Taliban was defeated in 2001 in Afghanistan, many of bin Laden's family members and top lieutenants had self-exiled to Iran.

I commend the work of the Canadian and the United States intelligence and law enforcement agencies for successfully thwarting this attack on our Nation. I believe it is the duty of this subcommittee to examine threats from al-Qaeda in Iran, and I have talked to the Chairman about the possibility of holding a hearing on the al-Qaeda presence in Iran and any threat it poses to the United States.

According to Secretary of State Kerry, Iran is moving closer and closer to processing a nuclear weapon. Nuclear proliferation in Iran, Syria, and North Korea should encourage us that we need to be prepared for an attack here in the United States.

We have been fortunate that a chemical, biological, or radiological, or nuclear attack has never come to fruition here in our country. In 2008 the Commission on the Prevention of Weapons of Mass Destruction Proliferation and Terrorism produced a report entitled "World at Risk." According to that report, the commission told us that they believed a terrorist attack would occur somewhere



in the world by 2013 and that it is more likely to be an act of biological terrorism.

It is now 2013 and we recognize the possibility of a chemical, biological, radiological, or nuclear attack from both foreign and domestic actors. However, recognizing an attack does not equal being prepared for one. The Weapons of Mass Destruction Commission concluded that the best strategy for biodefense was improving the ability to respond.

Last Congress this committee held a hearing on the threat from chemical, biological, radiological, and nuclear weapons. During those hearings our witness, Dr. Leonard Cole, who is with us today, stated that the response plans and exercises fall short of optimal levels, and planning that realistically incorporates Federal, State, local, and private-sector resources into a unified WMD response is largely absent.

In order to successfully prepare for this kind of attack we must alter policy and ensure that first responders have the resources that are necessary to be effective. The First Responder Grant programs are important to preparedness and should be provided at adequate levels.

As we saw in Boston, the actions of first responders were critical. Their actions were necessary in preventing a catastrophic loss of life in the wake of a chemical, biological, radiological, or nuclear attack.

I understand that today's testimony will highlight a Department of Homeland Security program that is designed to prevent these kinds of attacks in two cities that are facing the highest risks. Those cities are New York City and Los Angeles.

I know that these cities are vulnerable and depend on first responders. I particularly know that New York City does because first responders from the Buffalo and Niagara region have assisted them in the wake of the horrific 9/11 attacks and the devastation from Hurricane Sandy.

We know that these attacks could happen anywhere, and knowing this, there should be an incentive to properly fund first responders consistently answering the call when our Nation is in need.

Along with readiness, information sharing among Federal, State, and local officials must be strong when it comes to intelligence involving potential chemical, biological, radiological, or nuclear attacks. In this Congress I am an original co-sponsor of H.R. 1542, which strengthens intelligence and information sharing about weapons of mass destruction. It is my hope that this bipartisan legislation will be voted on favorably by this committee.

This legislation is a step in the right direction, but there is still much work to be done. First responders in all areas of risk need to be fully capable and equipped to handle an attack.

This means that full funding of State and local grant programs by the Federal Government, and this includes the Urban Area Security Initiative. I will be introducing—or reintroducing—legislation to once again provide funding opportunities for communities like Buffalo and Niagara Falls under this program, which were senselessly cut from funding.

Additionally, coordination needs to be improved among all officials at the Federal, State, and local level to have a response that is expedient, efficient, and effective.

I look forward to the witness testimony today, and I thank you for being here, again.

[The statement of Ranking Member Higgins follows:]

STATEMENT OF RANKING MEMBER BRIAN HIGGINS

APRIL 25, 2013

I would like to thank the Chairman for holding the first subcommittee hearing this Congress. I look forward to working with him in a bipartisan manner. Let me also publically thank the FBI, Joint Terrorism Task Force, Department of Homeland Security, and State and local officials for their efforts in apprehending a suspect in the Boston Marathon bombing. Their efforts exemplified the type of collaboration that we envision when State, local, and Federal agencies work together.

On Monday, the Royal Canadian Mounted Police announced that they, along with the FBI and DHS, disrupted a terrorist plot to attack a commuter train that runs from Toronto through the Northern Border at Niagara Falls into New York City. The individuals charged allegedly received support from al-Qaeda in Iran. I commend the work of Canadian and United States intelligence and law enforcement agencies for successful efforts to thwart an attack on our nations.

I believe it is the duty of this subcommittee to examine threats from al-Qaeda in Iran, and I hope the Chairman will hold a hearing on al-Qaeda in Iran and any threats it poses to the United States. According to Secretary of State Kerry, Iran is moving closer and closer to possessing a nuclear weapon. Nuclear proliferation in Iran, Syria, and North Korea should encourage us that we need to be prepared for an attack here in the United States.

We have been fortunate that a chemical, biological, radiological, or nuclear attack has never come to fruition in the United States. In 2008, the Commission on the Prevention of WMD Proliferation and Terrorism produced a report entitled World at Risk. According to that report, the Commission told us that they believed a terrorist attack would occur somewhere in the world by 2013, and that it was more than likely to be an act of biological terrorism.

It is now 2013, and we recognize the possibility of a chemical, biological, radiological, or nuclear attack from both foreign and domestic actors. However, recognizing an attack does not equal being prepared for one. The WMD Commission concluded that the best strategy for biodefense was improving the ability to respond. Last Congress, this committee held hearings on the threat from chemical, biological, radiological, and nuclear weapons.

During those hearings, our witness, Dr. Leonard Cole, who will also testify today, stated that response plans and exercises fall short of optimal levels. And planning that realistically incorporates Federal, State, local, and private-sector resources into a unified WMD response is largely absent.

In order to successfully be prepared for a chemical, biological, radiological, or nuclear attack we must alter policy and ensure that first responders have the resources that are necessary to be effective. The first responder grant programs are important to preparedness and should be provided at adequate levels.

As we saw in Boston, the actions of first responders are critical. The actions of first responders are necessary in preventing a catastrophic loss in the wake of a chemical, biological, radiological, or nuclear attack.

I understand that today's testimony will highlight a Department of Homeland Security program that is designed to prevent radiological and nuclear attacks in two cities that are facing the highest risk. This program is in New York City and Los Angeles. I know that these cities are vulnerable and depend on first responders. I particularly know that New York City does because first responders from the Buffalo/Niagara region have assisted them in the wake of the horrific 9/11 attacks and the devastation from Hurricane Sandy.

We know that chemical, biological, radiological, or nuclear attacks could happen anywhere. Knowing this, there should be an incentive to properly fund first responders who consistently answer the call in the time of anyone's need. Along with readiness, information sharing among Federal, State, and local agencies must be strong when it comes to intelligence involving potential chemical, biological, radiological, or nuclear attacks.

This Congress, I am an original co-sponsor of H.R. 1542, which strengthens intelligence and information sharing about weapons of mass destruction. It is my hope

that this bi-partisan legislation will be voted favorably by this committee. This legislation is a step in the right direction, but there still is work left to be done. First responders, in all areas of risk, need to be fully capable and equipped to handle an attack—this means full funding of State and local grant programs by the Federal Government.

This includes the Urban Area Security Initiative, or UASI. I will shortly be reintroducing legislation to once again provide a funding opportunity to communities like Buffalo and Niagara Falls for UASI, which were senselessly cut off from funding. Additionally, coordination needs to be improved among Federal, State, and local officials to have a response that is expedient and efficient. I look forward to witness testimony today and to hearing how we can work more to close the gaps that exist and provide resources needed to ensure we are resilient.

Mr. HIGGINS. Mr. Chairman, I also ask for unanimous consent to allow Congressman Al Green, from Texas to participate in this hearing.

Mr. KING. No objection. Glad to welcome the interloper back one more time.

Also, said the Ranking Member, you proposed a hearing on al-Qaeda in Iran. I think it is a very good recommendation. I will certainly discuss it with the Chairman of the full committee. But I think this is certainly a very appropriate topic for this committee, because especially since now the homeland security element has been brought in where, based on what the RCMP said, that this was going to be an attack against the American homeland.

So it is not just an overseas issue; it is something which directly affects us. I think it definitely comes within the jurisdiction of our committee and subcommittee, and so you and I can discuss with the Chairman and the Ranking Member, but I certainly think it is an excellent idea and a very good proposal.

Mr. HIGGINS. Thank you.

Mr. KING. Thank you.

Other Members of the committee, if they arrived, are reminded that opening statements may be submitted for the record.

[The statement of Ranking Member Thompson follows:]

PREPARED STATEMENT OF RANKING MEMBER BENNIE G. THOMPSON

APRIL 25, 2013

I would also like to thank the witnesses for appearing to testify on our efforts to counter the threat from a chemical, biological, radiological, or nuclear attack. Let me begin by publically thanking the FBI, Joint Terrorism Task Force, Department of Homeland Security, and the State and local officials for their efforts in apprehending a suspect in the Boston Marathon bombing. Their efforts were a great example of State, local, and Federal agencies working together.

State and local officials also need to work with Federal agencies to be prepared and ready in the event of an attack from chemical, biological, radiological, and nuclear weapons. In 2008, The Commission on the Prevention of Weapons of Mass Destruction Proliferation and Terrorism produced a report called "World at Risk". In that report, they told us that they believed that a terrorist attack would occur somewhere in the world by 2013, and that it was more likely to be an act of biological terrorism.

Well, 2013 is here and there are examples of how we need to be ready. During the week of April 15, we learned that poisoned letters were sent to a United States Senator and the President. While the poison contained in the letters, ricin, did not reach the Senate office nor the White House, the incident sparked terrible memories of the 2001 anthrax attack which killed 5 people and infected 17 others.

Not only can CBRN threats come from within our borders, but there are also CBRN threats from abroad. On Tuesday, Secretary of State Kerry told NATO that there needs to be a plan to guard against the threat of chemical weapons. We have also been paying close attention to North Korea, who has vowed to bolster its nuclear program. North Korea repeatedly violates United Nations Security Council

resolutions that forbid the “building and testing” of long-range ballistic missiles. In testimony before the Senate Armed Services Committee, Admiral Samuel Locklear, commander of the U.S. Pacific Command, testified that North Korea’s pursuit of nuclear weapons and long-range missiles represents a clear threat to the United States and its allies in the region. Admiral Locklear stated, in the event of an attack by North Korea, that he believes the United States has the ability to defend Guam, Hawaii, and U.S. allies. The Admiral rightfully has faith in the U.S. military as most Americans do. However, he is living in the reality of the continuing budget cuts that the Department of Defense, including Pacific Command, faces. According to the Admiral, the impacts of sequestration have created budget uncertainties, limiting our flexibility to manage risk and could potentially undermine our long-term strategic rebalance momentum.

Mr. Chairman, we have applauded not only the resilience of Americans throughout our tenure on this committee, but also those first responders and troops who protect and defend our country in the wake of both man-made and natural disasters. For instance, we are still applauding the people of Boston who are coming together singing “Sweet Caroline” in the wake of the horrific attack on one of their most cherished holidays. We rightfully and continuously salute the New Yorkers who have persevered in the wake of 9/11 as we have those who had to rebuild the Mississippi Gulf Coast after hurricanes and oil spills.

But now, is Congress saying that it knows that we are living with a nuclear threat, but cannot adequately fund the military and the Americans who may be in harm’s way? Can we not guarantee that in the event of an attack, we will provide our military with the resources that it needs to be as resolute as New Yorkers were in the wake of 9/11?

Since 9/11, there has been particular focus to not just the military, but first responders who must be ready for any type of catastrophic event, including an attack from a chemical, biological, radiological, or nuclear weapon. We saw and commended the efforts of first responders last Monday during the Boston Marathon attack. These first responders did not know whether the bomb was an IED or a “dirty bomb”. They knew people were hurt and they needed to step in and save lives.

Congress authorized funding for several cities and regions to make investments in emergency communications, planning, and response equipment. But during the 112th Congress, much to their surprise, 31 cities and urban areas found that they became ineligible for grant funding that they rely upon to maintain their preparedness—through no fault of their own. This left several first responders without the ability to maintain the equipment they purchased to provide protection and assistance in the wake of a CBRN and other attacks. However, there are two areas of the country for which the Department of Homeland Security has created specific funding through its Securing the Cities program.

I do not doubt that these areas need the money. I do not dare to say that these areas do not have vulnerabilities; however, it has been stated in previous hearings throughout several Congresses that a CBRN attack can happen almost anywhere in this Nation. As I stated previously, there are areas of the United States that are under a stated threat from the Supreme Leader of North Korea, and there are areas of the United States that are vulnerable to a CBRN attack from a lone wolf or terrorist cell. I hope our conversation today provides an opportunity to understand the role and needs of first responders related to CBRN threats. For this conversation to be productive, its content should not be concentrated to just one area of the country.

Mr. KING. Now, I am very pleased to introduce the distinguished panel of witnesses we have before us on this vital topic.

On the panel first is Commissioner Richard Daddario, who is the deputy commissioner for counterterrorism with the New York City Police Department. Prior to assuming this position, Commissioner Daddario served as the U.S. Department of Justice’s attaché in Moscow, which is particularly interesting in view of all of the—I am not going to ask you about it today, but the discussion in the last week with the FBI and Russian intelligence and security services; I am sure you have some thoughts on that—and as an assistant U.S. attorney for the Southern District of New York.

In his current position Commissioner Daddario is responsible for the NYPD’s large complement of detectives assigned to the JTTF and the department’s counterterrorism training and programs, in-

cluding the Lower Manhattan Security Initiative and the Department of Homeland Security-funded, as you mentioned, Securing the Cities Initiative.

Dr. Huban Gowadia is the acting director of the Domestic Nuclear Detection Office, DNDO, at the Department of Homeland Security. In this capacity Dr. Gowadia oversees integration of inter-agency efforts for technical nuclear detection and forensics and directs research, development, and evaluation, and acquisition activities for the Department's radiological and nuclear detection technologies.

Dr. Gowadia served most recently at DNDO as the deputy director and previously served as assistant director of its Mission Management Directorate, where she was responsible for ensuring an effective link between user requirements, operational support, and technology development across the nuclear detection architecture.

Scott McAllister is the deputy under secretary for State and local programs for the Office of Intelligence and Analysis at the Department of Homeland Security. In this role he manages the office responsible for Department and interagency support to the National Network of Fusion Centers.

Before coming to the Department he was chief of investigators of the Fort Myers Regional Operation Center for the Florida Developments—Florida Department of Law Enforcement. He brings more than 36 years of State and local law enforcement experience, including roles as a major crimes detective, SWAT operator, and joint terrorism force agents. The kind of guy to stay away from, I should say.

Dr. Leonard Cole is testifying today as a private citizen. Dr. Cole is the director of the Program on Terror Medicine and Security at the University of Medicine and Dentistry of New Jersey Center for Biodefense. He is also an adjunct professor in the school's department of emergency medicine and in the department of political science at Rutgers University Newark.

Dr. Cole is a noted bioterrorism expert and has written numerous books and articles on this topic throughout his career. I found out today that he had one of his students go out and interview me several years ago. I hope I did okay in the interview; I don't know what she said.

Okay. With that, I would now recognize the witnesses.

I want to especially thank the Department, by the way, for agreeing to participate on one panel to include Government and non-Government witnesses. I realize this is a unique circumstances and I want to thank you for doing that.

All the witnesses are reminded their written testimony will be submitted for the record, and I now recognize Commissioner Daddario for his testimony.

Commissioner Daddario.

**STATEMENT OF RICHARD DADDARIO, DEPUTY COMMISSIONER FOR COUNTERTERRORISM, NEW YORK CITY POLICE DEPARTMENT**

Mr. DADDARIO. Chairman King, Members of the committee—Congressman Higgins, Congressman Keating, and Congressman Green—thank you for the invitation to speak at today's hearing.

The subject of the hearing, “Counterterrorism Efforts to Combat a CBRN Attack on the Homeland,” is especially timely in light of international developments, which I am sure concern everyone in this room. Some of those have been mentioned by Chairman King in his opening, and I am going to touch on some of those points in my statement.

Very briefly, al-Qaeda has exploited the Arab Spring to its great advantage. Thousands of men who support its ideology have taken up arms to train and fight in Syria, Mali, Yemen, and other places in the Middle East and North Africa.

Not so long ago we heard that al-Qaeda was close to defeat. Now we see it has an expansive space in which to operate, recruit, train, and plan in areas with weak governments and states where its ideology has significant public and political support. That ideology advocates attacks against the United States in the homeland.

Iran appears to be intent on creating all the components it needs to assemble and deliver nuclear bombs. If it goes ahead and does that—and there is no reason to think it will not have that capability soon—it will be very difficult to prevent the proliferation of nuclear weapon technology in the Middle East.

North Korea’s intentions are unknown, at least to the police department and to me. However, its hostility to the United States is obvious. The danger, at minimum, that it could export its technical bomb-making expertise and its missile-making expertise is, therefore, real.

Now, the New York City Police Department pays close attention to these events because our city too often is the face of America to al-Qaeda and other enemies of the United States. I don’t need to go over the history of attacks and plots against our city. Almost all the plots and attacks that you mentioned recently, including the Canada case that Congressman Higgins referred to, have in some way involved New York.

New York City is in the crosshairs—it has been for a long time—and therefore, the police department and the city commit enormous resources to keep the city safe not only from conventional means of attack, but also by an attack using a radiological or improvised nuclear weapon. The possibility of such an attack is real.

President Obama has said—and again, I am touching on some points that Congressman King raised—“the gravest danger to the American people is the threat of a terrorist attack with a nuclear weapon and the spread of nuclear weapons to dangerous enemies.” He has also stated that “the threat of global nuclear war has gone down, but the risk of nuclear attack has gone up,” and, “We must ensure that terrorists never acquire a nuclear weapon. This is the most immediate and extreme threat to global security.”

The problem, as I have noted, is that the proliferation of nuclear technology, both to make bombs, to deliver bombs, is spreading.

We could not address the radiological and nuclear threat effectively without the Securing the Cities program. If Congress had not had the vision to fund Securing the Cities, New York City would now be completely vulnerable to a form of attack which might well overwhelm our capacity to recover.

Needless to say, the use of a dirty bomb or improvised nuclear device against our city would cause immeasurable personal, eco-

conomic, political, and psychological harm not only to the city but to the United States. The police department in the city of New York does not run the Securing the Cities program alone. It has 12 principal partners in New York, New Jersey, and Connecticut, so this is a regional program; it is not simply based in the city of New York. These 12 principal partners represent 150 local law enforcement and public safety agencies within a 40-mile radius of New York City.

The NYPD and its regional partners have achieved several important accomplishments. Among them, we have distributed and put to daily use enough personal radiation detectors, PackEye backpack detectors, radiological isotope identification devices, and mobile detection systems to afford us a measure of protection.

We are close to achieving complete wireless connectivity of detection devices by the NYPD at its Lower Manhattan Security Coordination Center. Data from these devices is thereby viewable in real time and stored for analysis.

We have developed one concept of operations for detection and interdiction of illicit radioactive materials. This concept of operations will enable the regional partners to lock down and secure the region based on 400 predetermined chokepoints in the face of an imminent threat.

We have conducted land-based, maritime, and transportation-based exercises involving surreptitiously transported radiological substance with great success. We did one in April 2011 with all our partners over a 5-day period and had great success finding each of the radiological sources that were deployed during that exercise.

Although we have made great progress, much work needs to be done. We need to put in place a permanent radiological defensive ring through the installation of fixed radiological detection equipment to monitor traffic at all bridges and tunnels that lead into the city. Now, I am not talking here about a portal over a lane; we are talking about using readily commercially available devices arrayed in ways using software so the we can detect a radiation source moving through traffic.

We also need to procure more advanced equipment to enhance land, air, and sea detection capabilities and enforce procedures and programs for inventory control, standardization, maintenance, and calibration of equipment. All these things are essential to the operation of Security the Cities program not only in New York but also if it is going to be deployed in other cities.

There are great lessons to be learned from what we are doing in New York that can be transported and applied to other cities where DNDO and the Congress may want to set up this program. So it is essential that the work in the city continue so that this program can be successful if there is an attempt to use it—transplant it to other cities.

In closing, the Securing the Cities program has been an extraordinary example of interagency and intergovernmental collaboration that would not exist and could not exist without Federal funding. We thank you for your support and look forward to your support going ahead.

Thank you very much.

[The prepared statement of Mr. Daddario follows:]

## PREPARED STATEMENT OF RICHARD DADDARIO

APRIL 25, 2013

Thank you for the invitation to speak at today's hearing.

The subject of the hearing—Counterterrorism Efforts to Combat a CBRN Attack on the Homeland—is especially timely in light of international developments which I am sure concern everyone in this room.

Very briefly—al-Qaeda has exploited the Arab Spring to its great advantage. Thousands of men who support its ideology have taken up arms to train and fight in Syria, Mali, Yemen, and other places in the Middle East and North Africa. No so long ago, we heard that al-Qaeda was close to defeat. Now we see it has an expansive space in which to operate, recruit, train, and plan in areas with weak governments and states where its ideology has significant public and political support. That ideology advocates attacks against the United States.

Iran appears to be intent on creating all the components it needs to assemble and deliver nuclear bombs. If it goes ahead and does that, and there is no reason to think it will not have that capability soon, it will be very difficult to prevent the proliferation of nuclear weapon technology in the Middle East.

North Korea's intentions are unknown. However, its hostility to the United States is obvious. The danger, at minimum, that it could export its technical bomb-making expertise, is therefore real.

The New York City Police Department pays attention to these events because our city too often is the face of America to al-Qaeda and other enemies of the United States. I don't need to go over the history of attacks and plots against our city. We are in the crosshairs and therefore commit enormous resources to keep the city safe not only from conventional means of attack, but also by an attack using a radiological or improvised nuclear weapon.

The possibility of such an attack is real.

President Obama has said:

- “The gravest danger to the American people is the threat of a terrorist attack with a nuclear weapon and the spread of nuclear weapons to dangerous regimes.”
- “The threat of global nuclear war has gone down, but the risk of nuclear attack has gone up.”
- “We must ensure that terrorists never acquire a nuclear weapon. This is the most immediate and extreme threat to global security.”

We could not address the radiological and nuclear threat effectively without the Securing the Cities Program. If Congress had not had the vision to fund Securing the Cities, New York City would now be completely vulnerable to a form of attack, which might well overwhelm our capacity to recover. Needless to say, the use of a dirty bomb or improvised nuclear device against our city would cause immeasurable personal, economic, political, and psychological harm to the United States.

The NYPD does not run the Securing the Cities Program alone. It has 12 principle partners in New York, New Jersey, and Connecticut. These 12 principle partners represent 150 local law enforcement and public safety agencies within a 40-mile radius of New York City.

The NYPD and its regional partners have achieved several important accomplishments, among them:

- We have distributed and put to daily use enough personal radiation detectors (PRDs), PackEye backpacks, radiological isotope identification devices, and mobile detection systems to afford us a measure of protection.
- We are close to achieving complete wireless connectivity of detection devices used by the NYPD to the Lower Manhattan Security Coordination Center. Data from these devices is thereby viewable in real time and stored for analysis.
- We have developed one concept of operations for detection and interdiction of illicit radioactive materials; this concept of operations will enable the regional partners to lock down and secure the region based on 400 pre-determined chokepoints in the face of an imminent threat.
- We have conducted land-based, maritime, and transportation-based exercises involving surreptitiously transported radiological substances. In April 2011, the NYPD and its STC partners conducted a full-scale, regional exercise designed to evaluate our ability to detect and interdict illicit radiological materials. The 5-day exercise involved chokepoints and other activity in New York, Connecticut, and New Jersey both on land, including rail and highways, and in the waterways of the region.

Although we have made great progress, much work needs to be done. We need to put in place a permanent radiological defensive ring through the installation of



fixed radiological detection equipment to monitor traffic at all bridges and tunnels that lead into New York City. We are working with Domestic Nuclear Detection Office (DNDO) to accomplish this goal using existing, commercially available detection equipment.

We also need to procure more advanced equipment to enhance land, air, and sea detection capabilities; and enforce procedures and programs for inventory control, standardization, maintenance, and calibration of equipment purchased with STC program funds across the region; continue work to network all the mobile radiation detection equipment purchased with STC program funds, not only that used by the NYPD; continue equipment training and exercises with the regional partners; and conduct advanced radiation detection and interdiction deployments on a regional scale to assure our operations are effective.

The STC program has been an extraordinary example of interagency and inter-governmental collaboration that would not, and going forward, could not exist without Federal funding. We thank you for your support.

Mr. KING. Thank you, Commissioner Daddario.  
Now I recognize Dr. Gowadia for her testimony.  
Dr. Gowadia, you are recognized.

**STATEMENT OF HUBAN GOWADIA, ACTING DIRECTOR, DOMESTIC NUCLEAR DETECTION OFFICE, U.S. DEPARTMENT OF HOMELAND SECURITY**

Ms. GOWADIA. Good morning, Chairman King, Ranking Member Higgins, and distinguished Members of the subcommittee. Before I go into my prepared remarks I would like to echo the Secretary's sentiments regarding the recent Boston incident.

Congressman Keating, my entire DNDO team joins me in expressing our significant concern for the victims of the incident. Our thoughts and prayers are with you.

But getting back to the oral remarks here, sir, thank you for this opportunity to be here today with Deputy Commissioner Daddario, Under Secretary McAllister, and Dr. Cole to discuss the Domestic Nuclear Detection Office, or DNDO's, progress in coordinating the United States Government strategy to detect illicit radiological and nuclear materials.

With your support and working with our Federal, State, and local partners, we have made significant progress in counter-nuclear terrorism. It is a pleasure to be here today with the deputy commissioner and the deputy under secretary. Their support and assistance are fundamental to the mission you have given my office.

Indeed, to maximize our ability to detect and interdict nuclear threats, it is imperative that we apply advanced technologies in operations that are driven by intelligence indicators and place them in the hands of well-trained law enforcement and public safety personnel. To this end, we have steadily increased our collaboration with the intelligence community and we continue to work with our stakeholders to build the domestic nuclear detection architecture.

A stellar example of our collaborative effort is the Securing the Cities program. In its first implementation DNDO partnered with New York, New Jersey, and Connecticut. Over the past 6 years more than 13,000 personnel have been trained in nuclear detection operations and over 8,500 pieces of nuclear detection equipment have been procured and deployed in the region.

In addition to frequent exercises, Securing the Cities partners conduct daily operations and routinely search to enhance oper-

ational postures based on information cues received in fusion centers.

I am pleased to report that based on much success in the New York City region, last year we were able to expand the program to the Los Angeles-Long Beach area, as you mentioned, Mr. King.

In addition to efforts under Securing the Cities, we have established relationships with over 35 States and territories. To guide their efforts, DNDO created a program management handbook with modules for specific operational detection environments. Once their capabilities are established, we support their operations by facilitating alarm adjudication from detection events in the field.

We also partner with other stakeholders to develop and conduct exercises, annually supporting up to 12. To date, we have exercised nuclear detection operations with 20 States across the country.

In partnership with our stakeholders, we have developed and implemented training standards. Since 2005, over 24,000 law enforcement and public safety personnel from across the country have participated in DNDO-supported training.

As I mentioned earlier, timely and accurate information-sharing is critical to the success of our mission. To this end, we work with our stakeholders—especially our I&A colleagues, to publish information bulletins summarizing relevant news articles, reports of lost and stolen sources, and other useful facts about radioactive materials.

We consider the need to surge detection assets we use during special events, or we recognize the need to surge detection assets for special events or times of increased threat, and so we maintain trailer-based units with an extensive suite of nuclear detection equipment and communications capabilities that can be deployed across the country to augment the detection capabilities of our operational partners. Since 2009 we have deployed these units at more than 60 special security events and exercises.

Finally, DNDO's red team partners with operational agencies to evaluate the nuclear detection systems and associated techniques, tactics, and procedures. This allows law enforcement and public safety officials to gain critical experience with uncommon nuclear sources, providing valuable feedback and leading to improved readiness and performance. In the last year DNDO conducted 30 red team assessments, both overt and covert.

We have come a long way since our creation in 2005. We have maintained our legislatively-mandated singular focus and have developed enduring partnerships with the intelligence community and with law enforcement to strengthen the Nation's capabilities to detect and interdict nuclear threats. Indeed, it is our goal to make nuclear terrorism a prohibitively difficult undertaking for our adversaries.

Thank you again for this opportunity to discuss DNDO's efforts to protect our Nation. I look forward to your questions.

[The joint prepared statement of Ms. Gowadia and Mr. McAllister follows:]

## JOINT PREPARED STATEMENT OF HUBAN A. GOWADIA AND SCOTT MCALLISTER

APRIL 25, 2013

Good morning Chairman King, Ranking Member Higgins, and distinguished Members of the subcommittee. We are pleased to testify today about the efforts of the U.S. Department of Homeland Security (DHS) Office of Intelligence and Analysis (I&A) and the Domestic Nuclear Detection Office (DNDO) to enhance information-sharing efforts with our State and local partners and protect against radiological and nuclear threats to the homeland.

Our testimony today focuses on DHS' work and the ways we have sought to strengthen our collaboration with our State and local partners who are on the front lines protecting our communities. In the 10 years since DHS was created, we have significantly improved our information sharing and operational collaboration as we work together to confront an evolving range of threats.

## DHS CAPACITY BUILDING WITH STATE AND LOCAL PARTNERS

DHS I&A and DNDO, along with our Federal interagency partners at the Federal Bureau of Investigation (FBI) and the National Counterterrorism Center (NCTC), all ensure that State and local partners have the information and tools necessary to address evolving threats. To accomplish this mission, DHS has focused on four key priorities in working with our State and local partners:

- Improve production and dissemination of classified and unclassified information regarding threats to the homeland;
- Continue to improve grassroots analytic capabilities through the development of a National network of State and major urban area fusion centers so that National intelligence can be incorporated into a local context;
- Standardize how we train State, local, Tribal, and territorial (SLTT) law enforcement to recognize indicators of terrorism-related criminal activity and report these suspicious activities to Joint Terrorism Task Forces for investigation and to fusion centers for analysis; and
- Increase community awareness and encourage the public to report suspicious activity to local authorities.

Fusion centers represent the cornerstone of the distributed homeland security and counterterrorism architecture through their presence as a grassroots analytic and information-sharing capability at the local or State level. As part of the Implementing Recommendations of the 9/11 Commission Act of 2007 (Pub. L. 110-53), DHS was charged with leading the effort to coordinate with and support a network of State or local-led information sharing and analytic centers in States and major cities throughout the country.

Through I&A's State and Local Program Office, DHS has included these fusion centers in the intelligence cycle by assisting fusion centers to build their capabilities to receive, analyze, and disseminate and gather information at the local level. I&A facilitates coordinated Federal support to fusion centers that results in a dynamic flow of information between Federal, State, and local partners, as well as the development of joint intelligence products and the rapid reporting of information with intelligence value.

DHS has made considerable progress in assisting fusion centers to build necessary information-sharing capabilities by:

- Deploying over 90 I&A intelligence personnel to fusion centers throughout the country to coordinate with DHS component intelligence and law enforcement personnel;
- Deploying 70 Homeland Secure Data Network systems across the country to provide access to Secret information and intelligence at the local level;
- Training State and local analysts at fusion centers to ensure they have the necessary skills and expertise to analyze and fuse intelligence and information from the intelligence community with local/regional context and produce relevant and timely products for their stakeholders; and
- Developing tailored product lines to meet the needs of State and local partners, and expanding the distribution of products to ensure all relevant and appropriate information is shared with State and local partners.
  - For example, I&A partnered with DNDO to ensure threat products are available to fusion center analysts via the Homeland Security Information Network (HSIN). These resources include radiological and nuclear awareness reports, as well as open-source information, detection tips, and Nuclear Regulatory Commission (NRC) lost and stolen source reporting (as appropriate).

While America is stronger and more resilient as a result of these efforts to strengthen the Homeland Security Enterprise, threats from terrorism persist and

continue to evolve. The Federal Government realizes that SLTT law enforcement, as well as citizens, businesses, and communities, are on the front line of detection and prevention efforts. Protecting the Nation is a shared responsibility in which the Federal Government benefits from a robust information-sharing infrastructure with State and local partners. These partners similarly benefit from the collaborative environment established within the fusion centers through their analysis of the National threat picture and the provision of products that are developed and tailored using local context to support the implementation of information-driven community-based solutions by local officials.

#### THREAT ALERT/NOTIFICATION PROCESS

In the event of a credible threat to the homeland, I&A, as part of a broader, coordinated Department effort including DNDO and other subject matter experts depending on the type of threat, utilizes its previously-tested threat notification process to assist our customers. In order to effectively reach our stakeholders, the threat notification process is accomplished in several ways.

- Depending on the classification and nature of the threat, I&A may work with DNDO, National Protection Programs Directorate (NPPD), the FBI, as well as other intelligence community partners to produce a “tearline,” which is a lower classification version of the report describing the threat.
- The jointly prepared tearline would be used to notify the Department’s stakeholders of the threat through a Joint Intelligence Bulletin, produced in conjunction with the FBI, to describe the threat or incident.
- Additional outreach would take place following the initial notification of the threat via Secure Video Teleconference (SVTC) or classified and unclassified teleconference, depending on the nature of the threat. As the threat evolves or as we receive more information, additional communication would be initiated.
- DHS may also use the National Terrorism Advisory System (NTAS) to message the threat to a wider external audience. NTAS Alerts are designed to appropriately notify the public and/or institutions of specific and credible terrorist threats of a limited duration. The alerts describe either “Elevated” or “Imminent” threats, and may recommend certain protective measures or suggest looking for specific suspicious behavior. A specific and credible threat is based on intelligence reporting from a reliable source or multiple sources, including enough detail with respect to the attacker, target, method, capability, or timing to permit countermeasures or pre-emptive protective actions.
- Elevated Alerts warn of a credible terrorist threat against the United States and its territories that is general in both timing and target, or details significant trends and developments in terrorism such that it is reasonable to recommend implementation of protective measures to thwart or mitigate against an attack.
- Imminent Alerts warn of a credible, specific, and impending terrorist threat or on-going attack against the United States and its territories that is sufficiently specific and credible to recommend implementation of protective measures to thwart or mitigate against an attack.

#### DNDO’S EFFORTS TO PREVENT RADIOLOGICAL AND NUCLEAR TERRORISM

Among the many threats we face as a Nation, nuclear terrorism poses one of the greatest threats to not only our security, but global security. Ensuring a coordinated response to credible intelligence of a nuclear threat is a whole-of-Government challenge. DNDO works with Federal, SLTT, international, and private-sector partners to develop radiological and nuclear detection capability in support of this mission. Working with partners from across the U.S. Government (USG), including the Departments of Energy (DOE), State, Defense, Justice, the intelligence community, and the NRC, DNDO develops the Global Nuclear Domestic Architecture (GNDA) and implements its domestic component. Specifically, DNDO coordinates with inter-agency partners and leads programs to develop technical nuclear detection capabilities, measure detector system performance, ensure effective response to detection alarms, and conduct transformational research and development for advanced detection technologies. Additionally, DNDO coordinates and improves nuclear forensics capabilities across the USG.

SLTT contributions are vital to the GNDA and we continue to work with these critical partners to build a flexible, multi-layered, domestic nuclear detection architecture based on capabilities that can be utilized by the Radiological Nuclear Strategic Group, led by the FBI, to integrate all assets and capabilities into a unified response when intelligence or information indicates a credible nuclear threat.

While DHS focuses on threats of all types, DNDO's singular focus is the prevention of a nuclear terrorism threat. The United States' ability to counter the nuclear threat is based on the critical triad of intelligence, law enforcement, and technology. To maximize our ability to detect and interdict nuclear threats, we apply detection technologies in operations driven by intelligence indicators and place them in the hands of well-trained law enforcement and public safety personnel. In the event of a radiological or nuclear event, the FBI would lead the CT/WMD Operational Response.

DNDO programs specific to the development of radiological and nuclear detection capability by SLTT entities include:

#### PLANNING SUPPORT

DNDO provides planning guidance to GNDA partners on developing, managing, evaluating and sustaining their radiological and nuclear detection programs. Through Program Assistance, DNDO helps multi-jurisdictional policy makers, program managers, and operational administrators work together to design and implement radiological and nuclear detection programs that build and enhance detection capabilities in support of the GNDA. Generally, detection programs are integrated into and leverage existing operational assets which decreases overall costs and increases operational impact.

DNDO has established formal working relationships with over 30 States and territories and works with SLTT partners to mature and advance radiological and nuclear detection and reporting capabilities. DNDO has developed a framework of scalable processes and products including concepts of operation, standard operating procedures, lessons learned, and best practices that can be tailored to the needs of the SLTT partner. Specific products include:

- The Preventive Radiological and Nuclear Detection (PRND) Program Management Handbook, with modules for specific operational environments such as Commercial Vehicle Inspection, Small Maritime Vessel Operations and Special Events, provides guidance for the administration of a domestic radiological and nuclear detection program at both the senior policy making and operational levels.
- The National Incident Management System (NIMS) PRND Resource Type Definitions categorize equipment, teams, and personnel consistent with other NIMS resource types to facilitate identification, inventory, and tracking. With direct State and local participation, DNDO developed the NIMS PRND Resource Types in 2011 to assist SLTT stakeholders with defining and building radiological and nuclear detection capability and to enable jurisdictions to categorize and deploy resources through Emergency Management Assistance Compacts or other interstate mutual aid agreements.
- The West Coast Maritime Pilot was implemented in the Puget Sound and San Diego to facilitate development of radiological and nuclear detection capabilities in maritime regions throughout the United States. Based on lessons learned, DNDO works with regional Area Maritime Security Committees to provide assistance in developing operational procedures, training, and exercises to develop radiological and nuclear detection capabilities that support the region's Area Maritime Security Plans.

#### TRAINING

DNDO provides training products and support to develop, enhance, and expand radiological and nuclear detection capabilities in support of the GNDA. In partnership with the Federal Emergency Management Agency (FEMA), DOE, and the Federal Law Enforcement Training Center, DNDO develops and implements protocols and training standards for the effective use of radiation detection equipment and associated alarm reporting and resolution processes. DNDO also develops training curricula in support of emerging detection technologies and operational profiles. Since inception, over 24,000 law enforcement and public safety personnel from 35 States have participated in DNDO-supported radiological and nuclear detection training.

#### EXERCISES

DNDO provides assistance in developing, designing, and conducting exercises that are compliant with the Homeland Security Exercise and Evaluation Program methodology. The exercises provide valuable hands-on experience for personnel performing radiological and nuclear detection operations and assist decision makers in integrating the detection mission into their daily operations. To date, DNDO has conducted exercises with 20 States and annually supports up to 12 exercises. DNDO

continues to develop and apply standardized and tailorable exercise templates and guidelines evaluating the implementation and performance of Federal and SLTT radiological and nuclear detection programs.

#### ENGAGEMENT

DNDO sponsors strategic engagements with State and local leaders via an Executive Steering Council (ESC) and a State and Local Stakeholder Working Group (SLSWG). The ESC and the SLSWG forums are part of DNDO's on-going outreach to and collaboration with SLTT agencies involved in radiological and nuclear detection. They are specifically designed to obtain feedback on DNDO's initiatives, learn about advances in SLTT, and facilitate communication, coordination, and collaboration within the radiological and nuclear detection community.

#### JOINT ANALYSIS CENTER

DNDO's Joint Analysis Center (JAC), which is supported by detailees from DOE, USCG, and the FBI, provides awareness of the GNDA as well as technical support and informational products to Federal, State, and local entities. I&A and the JAC regularly collaborate on the development of these products.

Utilizing the Joint Analysis Center Collaborative Information System (JACCIS), the JAC facilitates nuclear and radiological alarm adjudication and consolidates and shares information and databases. JACCIS provides a process for Federal and SLTT agencies to share radiological and nuclear detection information. The JACCIS Dashboard provides a secure web interface to collaborate with mission partners and uses a geographic information system to show detection information, detectors, situational awareness reports, and other overlays in a geospatial viewer. Web service interfaces to other mission partners' systems and content routers provide linkages to detection assets in real time. This same technology is employed to connect JACCIS to the TRIAGE system, maintained by the Department of Energy, National Nuclear Security Administration, to adjudicate alarms. This connection allows a seamless transition of alarm adjudication in JACCIS to be elevated to TRIAGE for National-level adjudication assistance.

#### TEST AND EVALUATION ASSISTANCE

Federal, State, local, and Tribal partners require reliable information on the technical performance, operational effectiveness, and suitability and limitations of currently available radiological and nuclear detection equipment to develop effective detection programs. DNDO has established a robust test and evaluation capability to rigorously test commercially available radiological and nuclear detection systems against National and international standards and in operational scenarios faced by Federal and SLTT end-users. DNDO involves operational partners in the planning and execution of test events ensuring equipment is tested in the manner in which it is used and provides operators with valuable hands-on experience with detection equipment and special nuclear material sources. Such tests independently assess systems to confirm vendor performance claims and provide operational data to develop effective concepts of operation. Since inception, DNDO has conducted over 80 tests and evaluations that involve all classes of radiological and nuclear detection systems, including personal radiation detectors, handheld, backpack and mobile detection systems, radiation portal monitors, and radiation detection systems suitable for maritime environments and aerial platforms. The results of these efforts are shared with operational partners.

#### RED TEAM

DNDO fields a unique Red Team to objectively assess the operational effectiveness and performance of DNDO programs and deployed radiological and nuclear detection capabilities at the Federal and SLTT levels. This capability evaluates deployed systems and operations and their associated tactics, techniques, and procedures, in as-close-to-realistic environments as possible. As covert and overt assessments are generally the only opportunity for operators of radiological and nuclear detection systems to gain experience detecting uncommon nuclear sources, these operations provide them with valuable feedback on the performance of their tactics, techniques, and procedures. This feedback enables operators to improve their concepts of operation and readiness. In the past year, DNDO conducted 30 overt and covert assessments.

## NEW TECHNOLOGIES FOR NUCLEAR DETECTION

DNDO continues to develop breakthrough technologies with significant operational impacts on our National capability to detect radiological and nuclear threats. For example, DNDO led the development of next-generation Radioisotope Identification Devices which are used by law enforcement officers and technical experts during routine operations. DNDO worked closely with U.S. Customs and Border Protection (CBP), U.S. Coast Guard (USCG), the Transportation Security Administration (TSA), and State and local operators to identify key operational requirements that drove the design of the new system. Based on an enhanced detection material, lanthanum bromide, and improved algorithms, this new handheld technology is easy-to-use, lightweight, and more reliable, and because it has built-in calibration and diagnostics, has a much lower annual maintenance cost. DNDO proactively engages industry to procure commercial off-the-shelf devices to field other new technologies for nuclear detection. DNDO procures these devices to be used by CBP, USCG, and TSA.

Additionally, DNDO has funded the development of radiation sensing materials such as Strontium Iodide ( $\text{SrI}_2$ ) and CLYC ( $\text{Cs}_2\text{LiYCl}_6$ ). In October 2012 a major milestone was reached as  $\text{SrI}_2$  and CLYC became commercially available for use in radiation detection equipment. This new generation of detectors will greatly benefit Federal, State, and local law enforcement and public safety personnel, because the devices are relatively inexpensive and provide significantly improved performance.

## SECURING THE CITIES PROGRAM

Since 2007, DNDO has supported the Securing the Cities (STC) Program to develop State and local capabilities to detect and prevent illicitly-trafficked nuclear materials that may be used as a weapon within high-threat/high-density urban or metropolitan areas. The program assists regions, selected through a competitive application process, to enhance regional capabilities to detect, identify, and prevent nuclear materials that are out of regulatory control; guide the coordination of Federal and SLTT entities in their roles defined by the GNDA; and encourage participants to sustain the nuclear detection program over time.

There are three phases to the program. In Phase I, DNDO assists State and local partners to develop a region-wide initial operating capability that is mutually supported through cooperative agreements, regional concepts of operations, interoperable equipment, collective training, and progressive exercise planning. In Phase II, DNDO provides additional resources to build upon the initial capabilities to enhance detection, analysis, communication, and coordination to better integrate State and local assets into Federal operations. In Phase III, STC works with regional partners to maintain connectivity with the established local architecture through alarm adjudication and subject matter expertise and provides advice on long-term training, exercise, and program support.

In the first STC implementation, DNDO partnered with State and local agencies in the New York City, Jersey City, and Newark areas. Over the past 6 years, more than 13,000 personnel have been trained in radiological and nuclear detection operations in the region and over 8,500 pieces of radiological and nuclear detection equipment have been procured and deployed. In addition to frequent exercises, STC partners conduct daily operations and routinely surge to enhanced operational postures based on information cues received in fusion centers.

Seeking to leverage the lessons learned from the first STC implementation and improve the radiological and nuclear detection capability of additional high-threat/high-density urban areas, in 2012, DNDO selected the Los Angeles/Long Beach area as the next metropolitan area for STC implementation.

## SURGE CAPABILITY

The ability to surge resources for use during special events, times of increased threat, or in response to information or events that indicate the need for enhanced detection capabilities, is critical. DNDO's Mobile Detection Deployment Program maintains trailer-based units outfitted with an extensive suite of radiological and nuclear detection equipment and communications capabilities. These Mobile Detection Deployment Units (MDDUs) are deployed regionally across the United States and offer a National radiological and nuclear detection surge package that can be deployed as needed to assist stakeholders to augment their capabilities. Each MDDU is configured to outfit numerous personnel and contains a number of mobile units, backpacks, high-resolution handheld devices, personal radiation detection devices, communications and tracking equipment. When deployed, the MDDU is accompanied by technical support staff to train personnel on the use of equipment and

to help integrate these surge capabilities into other protective operations. Since 2009, DNDO has deployed MDDUs for radiological and nuclear detection surge operations in support of Federal and SLTT law enforcement and public safety personnel during more than 60 special security events and exercises.

#### NATIONAL RAD/NUC CHALLENGE

To share best practices within the operational community, stimulate interest, and facilitate improvements in detection equipment so as to strengthen National radiological and nuclear detection capabilities, DNDO initiated the National Rad/Nuc Challenge. Through head-to-head competition, the Challenge will highlight excellence in detection efforts and encourage participants to enhance skills.

#### RESPONDING TO THE NATIONAL CRISIS FOR HELIUM-3

Helium-3 ( $^3\text{He}$ ) is an important element used in many National security, homeland defense, and medical applications. For decades,  $^3\text{He}$  has been used as a neutron detection component for radiation detection devices. In 2008, a critical  $^3\text{He}$  shortage was identified as demand outpaced the supply. Fortunately, DNDO was already exploring options for better, more cost-effective, alternatives for neutron detection. Once the shortage was identified, DNDO accelerated the process and led an interagency working group to address the development and use of alternative neutron detection technologies. DNDO also created a competitive application process through which SLTT agencies developing or enhancing radiation and nuclear detection capabilities would be eligible to receive an allotment of  $^3\text{He}$ . This effort has resulted in the distribution of over 500 liters of  $^3\text{He}$  to SLTT agencies since 2010.

#### CONCLUSION

In just a few short years, we have transformed how we work together—to share information, build our capabilities, combat threats in our communities, and address our shared challenges. As a result, today we are better at understanding risks, leveraging intelligence and information, and making sure that information is incorporated into law enforcement efforts across the United States. Through robust partnerships with State and locally-owned and -operated fusion centers, as well as an integrated approach to implementing programs such as the GNDA, we continue to strengthen the Nation's capabilities to detect all types of threats, including nuclear terrorism. Our efforts are not only advancing the capabilities and operational readiness of our partners, but are also enhancing National deterrence against a serious threat to our homeland.

We appreciate your continued support as we work with our partners to develop, evaluate, deploy, and support the necessary systems and resources to effectively share threat information and implement a nuclear detection architecture that can effectively protect the homeland, in response to credible, timely intelligence about radiological and nuclear threats.

Chairman King, Ranking Member Higgins, we thank you for the opportunity to discuss the on-going efforts of I&A and DNDO to prevent and protect against this threat.

We are happy to answer any questions the subcommittee may have.

Mr. KING. Thank you, Dr. Gowadia.

Now I recognize Mr. McAllister.

Mr. McAllister.

#### **STATEMENT OF SCOTT MCALLISTER, DEPUTY UNDER SECRETARY, STATE AND LOCAL PROGRAM OFFICER, OFFICE OF INTELLIGENCE AND ANALYSIS, U.S. DEPARTMENT OF HOMELAND SECURITY**

Mr. MCALLISTER. Good morning, Chairman King, Ranking Member Higgins, and distinguished Members of the committee. Our condolences are also echoed, as the Secretary and Dr. Gowadia has expressed, to the victims and their families from the tragic event that had occurred in Boston.

Thank you for the opportunity to discuss the role of DHS Office of Intelligence and Analysis in addressing the radiological and nuclear threat in the United States.



I&A agrees with the 2012 assessment from the director of national intelligence that a mass attack by a foreign terrorist group involving chemical, biological, radiological, or nuclear weapons in the United States is unlikely. However, the DNI also highlighted that the intelligence community remains concerned about limited attacks that could occur with little or no warning because terrorist organizations and other non-state actors remain interested in conducting this type of attack.

In light of the current global threat environment and as highlighted by the recent tragic events in Boston, the relationships and processes we have built to share information with our State and local partners are more important than ever. As a former Governor, Secretary Napolitano understands the critical role State and local governments play in protecting their communities. As she has oftentimes said, homeland security begins with hometown security.

It is essential that State and local partners have the necessary tools and capabilities not only to support National security efforts, but at the same time, can be leveraged to enhance local priorities. Strengthening these capabilities are critical to counter today's evolving threat, particularly when individuals responsible for the threats increasingly operate within the United States and do not travel or communicate with those overseas.

In support of this, DHS is committed to pursue a layered approach, working with our State and local partners to build a domestic counterterrorism capability. This approach includes training front-line officers to recognize and report behaviors that maybe indicate criminal activity associated with terrorism through the Nation-wide Suspicious Activity Reporting Initiative. It involves engaging our public through public awareness campaigns, such as, "If you see something, say something," by emphasizing the importance of reporting suspicious activity to the proper law enforcement authorities.

Finally, support to the National network of State and locally-owned and -operated fusion centers, furthering their role as the central information-sharing conduit between and among multiple disciplines and multiple levels of Government.

As directed in the Implementing Recommendations of the 9/11 Commission Act of 2007, the State and local program office of Intelligence and Analysis leads in coordination of Federal support to the National Network of Fusion Centers. Protecting the Nation is a shared responsibility and the Federal Government benefits from a robust information-sharing infrastructure with our State and local partners.

I&A has made considerable progress in assisting fusion centers to build out this information-sharing capabilities by deployment of intelligence personnel, the connection of classified homeland secure data networks, sponsoring secret-level clearances to our State and local partners, providing training and technical assistance for our State and local fusion center analysts, and developing tailored products to meet the needs of our State and local stakeholders. For example, I&A partners with DNDO to provide fusion center analysts with radiological and nuclear awareness reports, open-source information, detection tips, and relevant Nuclear Regulatory Commission lost or stolen source reporting.

In the event of a credible threat to the homeland, I&A leverages the expertise of appropriate subject matter experts, such as those in DNDO's Joint Analysis Center, to develop products and information for distribution through our established information-sharing architecture. In order to effectively reach our stakeholders, I&A utilizes its existing threat notification processes to include roll call releases, terror lines, joint intelligence bulletins that we produce in partnership with the Federal Bureau of Investigation, the National Counterterrorism Advisory System, secure video teleconferences, and other means of communication.

Additionally, I&A has remained proactive over the past year in disseminating information to our State and local partners on the threat posed by radiological and nuclear attack as well as providing the information of potential attack indicators and recommended reporting requirements. Products developed and distributed through personnel and information systems that I&A has deployed help ensure that our State and local partners have access to the necessary information they need to protect their communities.

I thank you for the opportunity to discuss the efforts of I&A in sharing information and intelligence with our State and local partners and our pursuit of getting the right information to the right people in a timely manner, and I am happy to answer any questions the subcommittee may have.

Thank you.

Mr. KING. Thank you, Mr. McAllister.

Now I would recognize Dr. Cole.

Dr. Cole.

**STATEMENT OF LEONARD A. COLE, DIRECTOR, PROGRAM ON TERROR MEDICINE AND SECURITY, UNIVERSITY OF MEDICINE AND DENTISTRY OF NEW JERSEY**

Mr. COLE. Thank you, Mr. Chairman. Oops, you heard me. Thank you very much, and the distinguished Members of the subcommittee—Representative Keating, Representative Green, good to see you again. 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 10 days ago and the subsequent letters containing ricin mailed to President Obama and Senator Wicker continue to consume 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 Larson on behalf of the Aspen Institute's Homeland Security WMD Working Group. WMD, of course, stands for weapons of mass destruction, which is a term that is generally equivalent to CBRN.

The Aspen Working Group project, 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. Among the Aspen paper's proposed actions was a call for reauthorization of the Pandemic and All-Hazards Preparedness Act. 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 Nation's—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 called Arestvyr.

Another of our Aspen paper's proposals was to advance public-private collaboration toward enhancing medical response capabilities. Again, last month a consortium of public, private, and academic institutions announced the establishment of a major new influenza vaccine development facility at Texas and A&M University.

The consortium is one of three centers for innovation introduced by the U.S. 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, as we have been discussing here, especially because of Iran's failure to curb its apparent efforts to acquire nuclear arms. Nuclear concerns were further escalated just last month when North Korea threatened to target the United States 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." I am holding this up. It is a publication that I think would be well-distributed to local and regional people in charge of having to respond in case there were the horribly unfortunate of having a nuclear detonation of any consequence on American soil.

Other protective measures against high-level radiation exposure should also be explored. For example, the new field of terror medicine might include the stockpile 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 radiation exposure.

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 very grateful that this subcommittee is focused on

enhancing America's preparedness and response capabilities for a possible CBRN attack.

Thank you.

[The prepared statement of Mr. Cole follows:]

PREPARED STATEMENT OF LEONARD A. COLE<sup>1</sup>

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 10 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 U.S. 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 United States 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

<sup>1</sup>Unless otherwise indicated the views expressed here are my own and not representative of any institution.

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.

ATTACHMENT [EXCERPT]

OPINION: PREPARING FOR THE NEXT ONE

*NorthJersey.com.—Leonard A. Cole is Director of the Program on Terror Medicine and Security at the University of Medicine and Dentistry of New Jersey. His most recent book, co-edited, is "Local Planning for Terror and Disaster: From Bioterrorism to Earthquakes."*

THE BOMBINGS at the Boston marathon Monday were a devastating reminder that the American homeland remains vulnerable to terrorism. Three people were killed, 176 injured, and judging from media coverage millions of Americans feel aggrieved. The country has been deeply shaken in part because the attack was such a surprise. It was especially shocking to those who had come to believe that terrorism was no longer a major concern.

To be sure, law enforcement officials and other emergency responders have maintained an awareness of the terrorism threat. But for many in the general population the heightened concern prompted by the 2001 attack on the World Trade Center had given way to complacency. This was reflected in Gallup polls during the past decade. After 9/11, 85 percent of Americans worried that another terrorist attack could be imminent. Ten years later the worriers had declined to 38 percent. The marathon bombings may reverse the trend.

In fact, about 50 terrorist plots against the United States have been thwarted since 9/11. At least 15 of them had targeted New York City, according to the city's Police Commissioner Raymond Kelly. Several plots, including the 2010 bombing attempt in Times Square, nearly succeeded. After a street vendor saw smoke coming from a parked car, he alerted the police. An ignited bomb was found in the vehicle, but police were able to disarm it before it could explode. Such close calls evidently had little effect on the public's declining unease about terrorism.

Even the shooting in 2009 at Fort Hood, Texas, by Major Nidal Malik Hasan, failed to stir a public reaction comparable to that by the Boston marathon attack. Hasan killed 13 and wounded 29. While firing his weapon, he repeatedly shouted Allahu Akbar ("God is Great"). In the previous months he had corresponded by email with Anwar al-Awlaki, then a senior al-Qaeda operative in Yemen. Still, the Obama administration considers Hasan's attack not an act of terrorism but only of "workplace violence."

Words that describe an action may frame how others view and react to it. Thus the Fort Hood shootings like other mass shootings, as at the Newtown, Conn., elementary school, are attributed to deranged individuals. Although horrible in their own right, they are not seen as inspired by any belief system. Conversely, terrorist violence is driven by ideological, political, or religious motivation. The terrorist's intended target is not just innocent individuals, but an entire nation or society. The aim is not just to kill but to demoralize, to demean, and ultimately to bend the will of the population.

*Terrorism remains a threat*

The Boston attack has reanimated the pain of 9/11 along with questions about the country's vulnerability. Many uncertainties remain. But the attack underscored the danger of holding the illusory notion that terrorism is not a serious threat. It also demonstrated how, with proper preparedness, lives could be saved and the national will strengthened.

The Boston assault was consistent with past efforts by terrorists to damage prominent American symbols. This annual marathon event has not only typically been festive, but iconic. It is held on Patriot's Day, which commemorates the first battles of the Revolutionary War. The nature of the event also meant that many protective measures were in place. Both security personnel and medical support were readily available. This led to a quicker and more effective response than might be expected in other venues.

The two bombs exploded seconds apart about 100 yards from the finish line. After the blasts, race participants and bystanders immediately began to comfort the injured and move them to safer areas. Police, emergency medical technicians, physicians, and nurses appeared almost as quickly. Later, all the responders received

high praise for their courageous and selfless rescue efforts. But scant notice has been given to the unusual circumstances that permitted this exemplary response.

In any marathon, the strenuous 26.2-mile run is likely to result for some in injury and illness. Runners experience falls, abrasions, sprained ankles, dehydration, exhaustion, and more. The exertion at times can even be life-threatening: Participants in past marathons have had heart attacks and died. Thus, stationing medical resources at these races has become common practice. New York City marathons, for example, have attracted more than 1,000 medical volunteers to provide emergency care at a network of tented field hospitals along the route.

Mr. KING. Thank you, Dr. Cole.

I now recognize myself for questions.

Dr. Gowadia, you mentioned about special events where there may be a nuclear detection surge. Would the Boston Marathon or other marathons be in that category?

Ms. GOWADIA. Yes, Mr. King. We actually have these trailer units which we can deploy upon request.

We do tailgate training out the back; we have technical support that goes out with the systems. There are communications elements to it, all kinds of mobile detection gear. Twenty to 40 personnel can be immediately trained and integrated into the existing operation.

Mr. KING. Now, does that depend on the local event requesting it, or the local municipality?

Ms. GOWADIA. Yes, sir, it does. We are always open to hearing from and bringing this asset out. It is created expressly for their use.

Mr. KING. Okay. Do you want to say whether or not it was present at the Boston Marathon, or would you rather not?

Ms. GOWADIA. I would prefer not to.

Mr. KING. Okay.

Mr. McAllister, if you could just take me through—for instance, you quoted, and I think rightly so, that hometown security is homeland security and homeland security is hometown security, probably more so than ever now that it looks as if most of the attacks are going to be launched from within the country rather than a large attack from overseas. I know you said that information is shared and that people have clearances, but since so much of that information would be classified, at what stage do you share it with local partners?

For instance, if you heard that X city—there is a potential nuclear threat, a dirty bomb against X city, what would be the procedure you would follow as far as when you would notify officials in that city? What level would they be at? Would it be police level? Would it be the mayor, or—and again, at what stage do you make that decisions?

Mr. MCALLISTER. Certainly, and thank you for asking that, Chairman.

First of all, what we strive for is getting security clearances out to our key stakeholders within the State and local environment. We have over 4,000 Secret-level or above security clearances distributed to our partners out in the State and local arena.

If there was an emerging threat what we would do is we would work to take that classified information and drill it down to the lowest classification level in order to get it out to the widest distribution possible. We have installed, through our National Net-

work of Fusion Centers, the capability to communicate in a Secret/Classified level as well as, you know, our Governors, our major city mayors, our fusion center directors, and other key stakeholders have that level of security clearance.

So we are able to communicate with them in a Classified environment, as well as, we would work with the FBI in order to develop a joint intelligence bulletin that could go out at a FOUO level or a Classified level, depending upon the nature of the threat. We would, again, work with them in order to distribute that through the existing information architecture to make sure that those State and local key stakeholders have informed decisions in order to make educated decisions on how to mitigate that threat in their community.

Mr. KING. Who would make that decision in the Department as to when that tipping point comes where the local officials, you know, should be notified?

Mr. MCALLISTER. That is ingrained in the way we operate on a daily basis.

Mr. KING. Okay. So there wouldn't be a question of the obligation being made later on that information was held back or wasn't sufficiently shared.

Do you feel that the information-sharing process is adequate right now?

Mr. MCALLISTER. I look at my philosophy as well as my colleagues' is that we have an obligation to provide rather than a need-to-know environment. We strive to make sure that we get information that could impact a community out to the right folks out in the field.

Mr. KING. So, Dr. Gowadia, to change topics a little bit, but it definitely involves nuclear detection, I know that DNDO is reviewing a number of technologies for cargo scanning—and this is an issue that is often brought up at this committee—including the multimode passive detection system. What is the status of those R&D projects?

Ms. GOWADIA. I believe you are referring to our nuclear, radiological imaging platform—

Mr. KING. Yes.

Ms. GOWADIA [continuing]. Technology, sir. The ATD, or the advanced technology demonstration, kicked off last year and I do believe we will be seeing characterization results, which is testing results, in the next fiscal year.

Mr. KING. Thank you.

Commissioner Daddario, I know there is, I guess, no definite way of answering the question, but what would have been the impact in Boston if that had been a dirty bomb as opposed to a conventional explosive? Also, how would, whether it is New York or other cities in—you have the expertise in New York—how would the city have responded to that?

Mr. DADDARIO. Just starting with New York, whenever we have a suspicious package and we have a bomb team that goes out they always have—they have radiation detection equipment with them so that when they approach a bomb the assumption is that it could be a dirty bomb, so that is one of the first things we do.

Let's say a dirty bomb were to go off in Boston, depending on the—how much material there was, there would be a large area that would be contaminated for a substantial period of time. Depending on where it was, in this case in the center of an important area of Boston, that would shut down the economic—all economic activity in that area, chase residents out of the area for substantial periods of time until there could be a clean-up.

There would be mass panic. People would be very reluctant to go anywhere near that area, which would mean that the ripple effect would extend far beyond the actual contamination zone. So I think the effect would have been, to a substantial extent, the shutting down of economic life in the city of Boston.

That is the concern we have, quite frankly, in the city of New York. If a dirty bomb were to go off in the middle of the city what would that mean for the future of the city? Could the city continue to operate?

So that is why these types of investments, we think, are so important. Obviously, you know, when I talk to you about it my concern is the city of New York. I can understand communities around the country—other cities—saying, “Well, what about us?” The reason for that is they understand that if something like this were to happen it could mean the death knell, really, for a major urban area.

Mr. KING. Without giving out too much information in a public setting, but all of us were extremely impressed by the tremendous medical response in Boston—the victims brought to the hospitals, the treatment they got. I mean, the—no one died once they were taken to the hospital—emergency care.

But if it was a dirty bomb with nuclear materials, are hospitals equipped to bring contaminated victims in? What would that do to other patients in the hospital or other facilities? Again, I don't want you to give up too much—I mean, that is a whole new dimension on this.

Mr. DADDARIO. It would create enormous challenges for the public—for the hospitals and public health system—how to treat the victims, whether there are enough types of medications available that would be effective in the stockpiles. It is certainly something we don't want to see, Mr. Chairman.

Mr. KING. Thank you, Commissioner.

Now I recognize the Ranking Member.

Mr. HIGGINS. Thank you, Mr. Chairman.

Just on this issue of the terror plot that was thwarted in Canada. Seemingly the introduction of an al-Qaeda presence in Iran to me is, you know, both disturbing and intriguing from the standpoint that Iran is a majority Shia population and al-Qaeda is Sunni-based. They also have an intolerance of those non-Sunni Islamists.

So I am just curious as to the thoughts of our panel about what seemingly is new information and what that does or doesn't do relative to a further threat to the United States, North America.

Mr. DADDARIO. The subject you are raising is an awful lot of information that I am not at liberty to talk about, but I think in the public record it is pretty clear that al-Qaeda—senior al-Qaeda people have been in Iran for some period of time. It has been conven-



ient for Iran to have them there and it is convenient for al-Qaeda to be there.

Iran is a, if nothing else, it is a passage, it is a point through which people travel to go from the Afghanistan and Pakistan area into the Middle East. So yes, there is tension for the reasons you have said, but there are also some common—they have some common objectives, the United States being a common enemy in their eyes.

So I think what you are seeing in—with Syria, maybe there is some more tension that is there. You know the case of Abu Ghaith, who recently left Iran, so that may be some indication of those tensions.

But it is not new news that al-Qaeda has had a presence in Iran. How hospitable that hosting had been and how consistently hospitable it has been is something which is worth thinking about but the presence of al-Qaeda in Iran continues to this day.

I think that is about all I can really say.

Ms. GOWADIA. I will focus my comments predominantly on the nuclear element. Precisely because we worry about the proliferation, as Chairman King mentioned in his opening statement, we work very hard, sir, to build a layered architecture that takes into account all kinds of terrorist threats.

So it is our fundamental responsibility to build robust nuclear detection systems, and also, DNDO is responsible for nuclear technical forensics capabilities for the Nation, and we build them robust enough to deal with a wide variety of threats. It is agnostic to the country or the terrorist organization of concern.

Mr. MCALLISTER. From my perch two things come to mind. One is, right now that is still an active investigation with the Federal Bureau of Investigation. I know Director Mueller was on the Hill the other day and asked about that and, you know, in an open setting couldn't comment on that.

We are working with the FBI on a joint intelligence bulletin pertaining to the Canadian incident that will be distributed today. It is a Classified level, but I am sure that we will make that available to the committee.

Thank you.

Mr. COLE. Well, I would just speak to the general necessity all the more that we be concerned that Iran not be permitted to even get close to a final development of a nuclear weapon, with all of the obvious implications that that would have, including possibly, then, making such a weapon more accessible or knowledge about it more accessible to al-Qaeda and other groups on collaboration with Iran, perhaps.

Mr. HIGGINS. I yield back, Mr. Chairman.

Mr. KING. Ranking Member yields back.

Now the gentleman from Massachusetts. Again, I join with the others in expressing our thoughts, prayers, and condolences to you and our gratitude for the people of Massachusetts who were the responders.

Gentleman from Massachusetts is recognized for 5 minutes.

Mr. KEATING. Thank you, Mr. Chairman.

Thank you, Ranking Member.

Thank you for your remarks, all of you on our panel.

In Boston there is a situation where the operations of the attack were conducted by two people that were domestic—at least had lived here—one a citizen, one a noncitizen, but had lived in the Commonwealth for a period of time, lived in the United States for a period of time. Some of the planning, at least, was done by these two individuals, and the procurement of some of the materials used in that explosive—that was also at least done by some measure by those two individuals. There might have been more, but at least some of it.

My question is this: In that instance there was easily accessible materials and there was enough knowledge to put an explosive together. What type of biological, chemical, radiological materials are accessible by average folks to put together this kind of attack that we are having the testimony on today?

I know Dr. Cole mentioned concerns about security around certain laboratories, and certainly that is an area, but could you comment on that, since I think those kind of attacks are going to become more prevalent, they are harder to detect, and I just want to see in the instances of biological, radiological, chemical attacks—nuclear attacks, as well—what can they get their hands on and what can people be reasonably expected to do to put together an attack using these materials?

Dr. Cole.

Mr. COLE. Well, I think it is important to differentiate between the nature and character of each of these weapons, the CBRN. In the case of biological it is a rather unique weapons system if natural—naturally occurring pathogens are used for hostile purposes. Yes, security is important, and there is not a standardization, as I mentioned, for laboratory work.

There are various countermeasures that we have in place, including detection systems, which sometimes are not as effective and accurate as we wish, but nevertheless, we have moved in this direction in terms of biological materials, if they are—certainly if they are in the environment, if they floated and they ought not to be there. If appropriately engaged in advance, there are defenses against them from antibiotics and vaccines and other kinds of countermeasures.

Radiological is entirely different. It is not contagious. I know Chairman King mentioned the possibility of bringing somebody to a hospital who has been exposed to radiation. That would not be dangerous to others nearby. However, depending on the intensity and the level of radiation that a person has been exposed to, this could be critical to that person's life.

Mr. KEATING. Well, if I could interrupt?

Mr. COLE. Sure. Sure.

Mr. KEATING. Can they get their hands on our—I will be very clear: Can they get their hands on these things and use them in an attack? How accessible is that for people like these domestic or homegrown terrorists?

Mr. COLE. In the case of biological, which is my particular expertise, it is not at all difficult to get—for anybody with a will and a little understanding of how you can get these materials, including from natural-occurring locations—anthrax, plague bacteria—these occur in nature. If you get a highly dangerous strain, and with a

little knowledge about laboratory techniques, it would not be difficult to create a biological spread that could be harmful to a lot of people.

I think that would be much less so for certain other kinds of agents. I will let others speak to radiological. But you know, if you talk not about a nuclear blast but scaring a lot of people with the release of some levels of radiation, there are radiation capabilities from machines in medical offices, dental offices, hospitals. That alone, among other commercial uses for—with radiation, makes those—that concern real.

Mr. KEATING. Dr. Gowadia, you wanted to comment.

Ms. GOWADIA. Yes. First and foremost, our special nuclear material in this country is secure. So the nuclear element, I think, we can rest assured on.

Dr. Cole is right, there are radiological sources in hospitals, et cetera. But again, New York is a great example where we actually collaborated with the NRC—Department of Energy, and the Nuclear Regulatory Commission to harden these sources. Blood irradiators do have large radiation sources, but we are working to secure them, harden them so it gets harder and harder for them to acquire these materials.

Mr. KEATING. So we are at risk, clearly, on that with these same group of terrorists working within our borders?

Ms. GOWADIA. Yes, we are. But we continue to work as hard as possible to make the radiological materials hard to acquire and use as the first line of defense.

Mr. KEATING. Thank you, Mr. Chairman.

If anyone else could comment on that if they wanted to? No?

Then I yield back, Mr. Chairman. Thank you.

Mr. KING. Thank you.

Now I recognize former Member of the committee and permanent visitor to the committee, gentleman from Texas, Mr. Green.

Mr. GREEN. Thank you, Mr. Chairman. You are always very gracious to allow me to have this opportunity and I especially thank you and the Ranking Member.

Mr. KING. I was hoping that with the change of chairmen maybe we wouldn't have—

[Laughter.]

Mr. KING. But since the new Chairman is also from Texas I guess you are here forever, so—

Mr. GREEN. He and I are great friends. Thank you so much.

Mr. Keating, I do express my sympathies for the victims and my condolences, as well.

To the members of the panel, thank you for your very thoughtful testimony. I must tell you that I was somewhat impressed, to be quite candid with you, with the way the effort was coordinated around what happened at the marathon. I am still impressed at how quickly things came together and how we were able to either capture or kill—and I don't like the terminology, but it speaks to what we are capable of doing—within a very short period of time persons who committed a dastardly deed.

So I would like for you, if you would, so that we can just get it in the record, some testimony about how successful that coordi-

nated effort was. I am willing to start with Mr.—either person can start, quite candidly, to do this.

Mr. DADDARIO. I think you are right, there was the initial response was very quick. A lot of resources came that were brought to Boston to assist in the investigation from—not just from the Federal Government but from local police agencies.

There were, for example, from our department detectives from the Joint Terrorism Task Force who were in Boston. There were also other officers from other parts of the police department there. I don't think New York was alone in that regard.

There was a, I think, after a little bit of—you know, whenever something like this happens it takes a little bit of time to put—to get everything organized, but I think a good sharing of information. The briefings were conducted well so that people were informed of what was going on. I think that was important.

There is always, as you know, confusion when these type of things happen, and this is the case which is no different than others. But all in all, I think it was an excellent effort.

It is still on-going, Congressman. This investigation is not completed. There is still a lot of work to be done.

So the need to organize the way you have said, bring all the different actors and parties that have an interest in the case together and work together, continues to be very important.

Mr. GREEN. Would anyone else like to comment?

Yes, Mr. McAllister.

Mr. McALLISTER. Thank you, sir.

In order to adequately address that I would like to go back about 10 years, and that is the decade leading up to this tragic event. Since 2002 the Department of Homeland Security, through State preparedness grants—Boston has received about \$370 million in order to prepare for such a tragic event—in particular, training, equipment, and resources to detect improvised explosive device prevention, response, and recovery training and equipment.

Last year funding was used in order to speed and improve the efficiency in responding to such an IED threat. Our FEMA has supported 12 exercises and training opportunities over the past several years, 8 of which over the past 3 years in areas such as biological attack, hazardous materials, and other types of mass attacks. There has been over 5,500 first responders in the Boston area that have been trained on mass casualty response training and the like.

I would like to just also talk about the fusion centers. The Boston Regional Intelligence Center was there for the preparation of the special event as well as the—dealing with the incident, and then the post-incident investigation.

They handled everything from video exploitation to look for the culprits responsible for that, geospatial imagery for—to assist the first-line commanders in what was going on on the ground. They handled all kinds of requests for information, suspicious activity reporting, seamless updates to those decision-makers not only in the impacted area but also at the State emergency response center.

They worked seamlessly with the State fusion center, as well, and provided accurate and timely information on what was evolving to the National Network of Fusion Centers as well as our Fed-

eral partners. It really is a model of just a well-performed, although tragic, event in how to share intelligence and information.

Mr. GREEN. Thank you, Mr. Chairman. I know my time is up.

So if others of you, if you would like to respond, if you would put something in the record, I will be honored to read it. Thank you.

Thank you, Mr. Cole.

Mr. KING. Thank you.

I just have one follow-up question to Mr. Daddario, and you may have touched on this. But taking New York, what are the trip wires as far as you being alerted if somebody is purchasing suspicious materials, whether radioactive or otherwise.

Mr. DADDARIO. New York has an outreach to businesses that sell materials that could be used for an attack—chemicals, gun powder, certain types of components for bombs. So we do an outreach so that if somebody goes and buys these materials we hope that it will trigger a call in to a law enforcement agency.

There is nothing that requires, under the law, these calls, but—so we have to do this type of outreach. For example, a year or so ago we started doing some outreach to companies that sell pyrotechnic materials on-line, and that apparently may have been what was used in this case, because we recognize that you can go on-line and buy fuses and pyrotechnic powder.

If you put that, as you saw, in an enclosed container along with BBs and metal you can cause enormous harm from what is, you know, derogatorily called a crude bomb. These are not crude bombs; these are very effective small bombs.

I think people, you know, shouldn't use the term, you know, "It is a crude device," or something of that nature. The fact is that you can now go out and acquire unregulated materials and buy—to make bombs—that are very, very effective.

That is obviously a concern to us—disturbing to us. So you have to create this—do this type of outreach to the companies, the businesses that sell this so that if they see something suspicious—somebody coming in and buying more than they need or coming back over and over again—that there is a call made out to law enforcement, and that is what we try to do.

Mr. KING. Also, my understanding is that also applies to seemingly innocuous items, such as beauty products.

Mr. DADDARIO. Yes. I mean, beauty—those are chemicals, and those chemicals can be mixed together to, you know, to form—to make bombs or poisonous gases.

Mr. KING. Thank you.

I have no further questions.

Any Members of the panel have any—gentleman from Massachusetts.

Mr. KEATING. Thank you, Mr. Chairman.

I just was going to touch base with Mr. Daddario. In New York it is well-known that surveillance cameras are—have the most highest concentration probably in our country. That might be correct. But one of the issues that is really taking hold and being considered going forward is to what extent, in a city like Boston, where we, you know, had quite a few and that was really integral to investigators' success in going forward, what do you really ad-

wise, given your experience in New York City, on the need in other cities for increased surveillance equipment?

Mr. DADDARIO. We have a program within the Counterterrorism Bureau to deploy cameras. We do it a little differently than some other cities. Other cities may have put out more cameras than we have, but our program is based on the following kind of design: We try to pull in—we use cameras that the police department installs, other public authorities install, and private businesses install.

What we do is we bring those into our network—we bring all the video data into a central core that allows us to store it, review it for back—we go back 30 days. We can do analytics on all that information. So that, to us, is a very effective way of handling video information.

Cameras themselves—the police department believes very strongly in. One, we think they have a deterrent effect, provide for security not just for a counterterrorism perspective but for general law enforcement, and as an investigative tool after an event takes place they are invaluable, and you saw that in Boston. If you wouldn't have had those cameras, you know, you would—right now we would be in a much different position—situation than we are now.

So I think any city, as part of its security plan, should really give a close, hard look at how it can best deploy cameras—what type, where, how to architect them. I think that is an essential part of any security policy and program.

Mr. KEATING. Yes. The digital cameras I saw at the airport in Boston—Lincoln Laboratories MIT—

Mr. DADDARIO. I am familiar with—

Mr. KEATING. It is extraordinary. They can see the entire terminal all at once live time, and experts can look at any activity that is not done, and this computerized side of that, as well, as I understand, and they can see a blade of grass with high definition three football fields away. I mean, so the technological developments are another aspect of this surveillance, as well.

Mr. DADDARIO. Congressman, if you ever want to come to New York and look at our system—it is called the Domain Awareness System—let us know, be happy to show it to you.

Mr. KEATING. Great. Thank you.

Thank you. I yield back, Mr. Chairman.

Mr. KING. Thank you.

I would just follow up on what the commissioner said. I am not in a position to invite people to the NYPD, but it really works—especially, you know, if Boston is considering it, it is very impressive to look at and there is even more than the commissioner has described.

I mean, it is—Commissioner Kelly would have shown, there is some guy wearing a green sweater on 11th Street. You can pick out almost anything on that. It is amazing how it is done, and very sophisticated, and you have so many partners working in there from both the police department and the private sector at this location I have, so.

Gentleman from Texas.

Mr. GREEN. Thank you, Mr. Chairman. I promise to be terse and laconic.

I would like for you to respond as a follow-up to Representative Keating's question with reference to the citizenry, "See something, say something," in terms of cameras that—in the hands of citizens and the social networking that took place with this technology—the impact that that has, please?

Mr. DADDARIO. Congressman, are you referring to how people can take pictures on their cell phones now and—

Mr. GREEN. Yes, sir.

Mr. DADDARIO [continuing]. And send it in?

This is a very interesting development, and I think police departments, law enforcement officers are trying to get a handle on how to deal with that. It is a lot of information now that can be sent to police departments.

The problem is you don't have a way to communicate with the person who sends it to you right away, so you are not sure what it is, you—so lacking that dialogue or that conversation, it makes it harder to figure out how to respond. But it is absolutely something which all law enforcement agencies and public safety agencies have to start to think about, is how can it encourage this information be brought in and what—how to handle it effectively once it comes in the door.

I will tell you, we haven't exactly fully come to terms with that. It is something that the New York City Police Department, other police departments, have to give real thought to.

Mr. GREEN. Mr. Chairman, just as a follow-up, should there be a pilot program? Would you be interested in some sort of methodology by which you can pull forward to develop these ideas?

Mr. DADDARIO. Well, we are thinking about it but we are always interested in getting help.

Mr. KING. The gentleman yields back.

I want to thank all the witnesses for their testimony.

Oh, Dr. Cole.

Mr. COLE. If I may?

Mr. KING. Surely.

Mr. COLE. I think protection of the citizenry stands on two major pillars. One has largely been discussed: How you prevent, how you detect in advance and you protect the public by not having an event.

The other equally important pillar is, in the unfortunate occasion that the attack happens, what about the response? On this I would like to make one very important point. Through media reports, through general discussion is—there is a full appreciation and acknowledgement that the medical response and rescue response was superb at the Boston Marathon, but it is extremely important to recognize how atypical that situation was relative to other possibilities in the United States.

For example, at the New York Marathon there are more than 1,000 medical volunteers stationed across the route heavily concentrated near the finish line. I don't know the number of medical volunteers at Boston, but there were many, many available literally within seconds of the time of the blast.

There would have been many more lives lost simply through the loss of those legs that were blasted away, or arms in some cases. With nearby, medically-trained people—EMS people, physicians,

nurses—the bleeding was staunch. That is one of the reasons that there was an unusually successful manner in terms of saving lives.

Beyond that, as you well know, Congressman Keating, some of the most outstanding medical institutions in the world were literally one or one-and-a-half miles away—Harvard's series of medical schools, Tufts, Boston University. This is not what we can expect, God forbid, if there were another occasion where there was a blasting of people where you have medical folks at hand within moments and just a couple of minutes away getting to the hospitals.

We need better preparation, preparedness, and public health capabilities throughout the country at many locations beyond a marathon that would draw such a focus of intent including, by the way, not just for medical but the security people. There were huge numbers of security police, other officials that would not necessarily be populating locations throughout the country in equal numbers.

Mr. KING. Thank you, Dr. Cole.

I want to thank all the witnesses for their testimony and Members for their questions. I think all of us are on the same page coming from different perspectives, but in dealing with the issue I think there is a real unanimity as to steps that should be taken and what is being done.

I want to especially thank the Department for their work, thank Commissioner Daddario, thank Dr. Cole for coming back again and for his insights.

I would just say, the Members of the committee may have some additional questions for you and we will ask you to respond to those in writing if they come in.

So without objection, the committee stands adjourned.

[Whereupon, at 11:28 a.m., the subcommittee was adjourned.]

