

UASI Keynote Address by DHS Assistant Secretary for Health Affairs Jeffrey W. Runge, M.D

Release Date: April 21, 2008

Charlotte, NC
(Remarks as Prepared)

Introduction:

Thank you very much for that warm welcome. Let me start off by saying it is great to be back home in Charlotte – you could not have picked a better city to host the 2008 National UASI Conference.

I especially want to thank the organizers of the National UASI Conference. I would be remiss if I didn't especially thank my good friend Deputy Fire Chief Jeff Dulin, who has been a fire fighter for almost 30 years now.

On behalf of Department of Homeland Security Secretary Michael Chertoff and the President, thank you for your outstanding contributions to ensure the continued safety and security of our Nation. We owe all of you a huge debt of gratitude.

Last year's UASI Conference was a real success. It highlighted the importance of bringing together the emergency first responder community – from emergency medicine to law enforcement to communications to operations in our regional fusion centers, and included all the disciplines: industry, government and academia.

I recognize many of you in the audience, but for those that I haven't had the opportunity to meet personally yet, I'd like to introduce myself. I've spent many years in emergency medicine, as an E.R. doc, teacher and researcher, before heading to Washington D.C. in 2001 to become the 12th Administrator of the National Highway Traffic and Safety Administration.

In September 2005, Secretary Chertoff asked me to serve as the Department of Homeland Security's Chief Medical Officer to advise him as the nation's incident manager, the FEMA Administrator and other leadership on medical and public health matters, ranging from bioterrorism to pandemic influenza to other natural disasters.

Today, I serve as the Chief Medical Officer and the Assistant Secretary for the Office of Health Affairs. We are constantly planning and preparing ways to better serve you and protect the health and safety of Nation.

There are a few specific issues I'd like you to take away from our discussion. This isn't going to be a talk about our accomplishments or progress.

I'd like to speak to you today about what keeps me up at night: the threat of a biological agent being disseminated in one or multiple cities in the U.S.

Bioterrorism:

As many of you may or may not know, the threat of bioterrorism is real and is here to stay for the foreseeable future.

To begin, here are some of the tough questions that keep me up at night: How do we prevent a large-scale bioterrorist attack from becoming a 'nation-changing' event? Are we prepared to rapidly detect a biological attack through early warning systems? Are state and local first responders adequately trained and equipped to handle a bioterrorist attack? Are we able to effectively distribute and dispense life-saving antimicrobials and other medications in the short window of opportunity once people have been exposed?

Will a city contaminated by an aerosolized anthrax attack ever be able to recover or will it be rendered useless for many, many years?

Current Threat:

It's also fair to say that a large-scale aerosolized anthrax attack is our #1 biological threat by a significant magnitude. Given the fact that a biological attack wouldn't involve planes crashing into buildings or a nuclear detonation, many people unfortunately perceive this threat to be a lower-risk threat.

State-sponsored terrorist groups, like al-Qaeda have made their intentions to develop and weaponize biological agents known quite publicly.

Our partners in the Intelligence Community have confirmed that in the late 1990's that al-Qaeda began developing a biological weapons program, including the construction of a low-tech facility in Qandahar, Afghanistan for the production of anthrax.

Fortunately, U.S. military forces discovered this one particular facility, but we're confident that we haven't been able to disrupt their intent.

So, it is clear to us in the Intelligence and Homeland Security communities that al-Qaeda seeks to develop biological weapons to use against the U.S., both here and abroad. Aerosolized anthrax is their #1 choice of a biological weapon.

An attack in one U.S. city alone using a simple defogger attached to the back of a pick-up truck or an agricultural sprayer to disseminate anthrax spores, could potentially kill or injure hundreds of thousands of people.

A simultaneous attack on multiple cities using these methods would certainly be within the magnitude of our enemy's intent and possibility.

Anthrax Scenario:

I'd like to take a few minutes to walk you through a notional scenario involving the dispersal of aerosolized anthrax in downtown Charlotte.

The scenario involves a few non-descript trucks driving through the city releasing an aerosolized form of anthrax. This could be done by a number of methods.

Given that there is no "big explosion" associated with the dispersal of a biological weapon, it is critical that early-warning capabilities alert local officials as soon as an attack has occurred. This is critical in order to begin administering life-saving antimicrobials and post-exposure prophylaxis right away.

Hundreds of thousands of people would likely be exposed and require immediately medical treatment through post-exposure prophylaxis. Developing timely and accurate modeling of the plume based on wind current "upwind", time of day, indoor vs. outdoor release, building locations, etc. are all critical to determine the specific areas that would be contaminated.

With inhalational anthrax it is critical that post-exposure prophylaxis begin 48-72 hours after exposure in order to prevent serious pulmonary effects or death.

During an aerosolized anthrax release, if an early-warning detection capability such as BioWatch, is not present, then detection and confirmation of an attack would not begin until people start showing up to the E.R. in droves with flu-like symptoms – by then much of the damage will likely have been done.

Without early-detection capabilities, the incubation period would have almost certainly have crossed the 48-72 hour threshold. The distribution of antimicrobials, such as Cipro and Doxycyline, from the SNS to the people would have to occur immediately.

Law enforcement would be required to ensure civil order and to determine agent characterization and attribution prevention of 2nd attacks through characterization and attribution would also be paramount.

On-site decontamination would have to begin as virtually everyone and everything that came into contact with anthrax spores would be exposed – people, vehicles, buildings, the ground, the water and food supply, etc. would all have to be tested and go through a decontamination process.

Recovery would be a long and arduous process. Buildings and other physical locations that were contaminated would be rendered useless for months or years.

Given the biological threats we face, whether it's bioterrorism or a pandemic influenza, it is important to plan for scenarios of many victims with serious conditions and many "worried-well". With an anthrax attack on a large-scale, we can expect many people to begin showing clinical symptoms within 48 hours of exposure.

This is why an early detection capability is so critical. If we can identify an agent as early as possible, then we

can begin rapidly deploying medical countermeasures to the people, which is key to saving lives.

Health System Preparedness and Integration:

As I've highlighted in the previously mentioned scenario, the threat of bioterrorism is not just a public health or medical issue to be addressed in a vacuum. It involves an entire system of health preparedness to protect the health and safety of the public.

This is where the Department of Homeland Security comes in. We are responsible for integrating and coordinating a comprehensive national preparedness and response capability. HSPD-5 (Management of Domestic Incidents) is part of the Department's roles and responsibilities.

Secretary Chertoff serves as the lead Federal official charged with coordinating the Federal preparedness and response and integrating it with the state and local capabilities.

A large-scale bioterrorism event would affect virtually all sectors of society, including the economy, healthcare, critical infrastructures, the food and water supply, transportation, etc.

As such, efforts must be integrated into a system of preparedness, from the elected leaders (Governors and Mayors) to responders from the medical community to emergency management (HAZMAT, fire/rescue, etc.) to law enforcement to public health networks.

Our nation is made safe because of the efforts of our first responders – police, EMS and Fire services – doing what they do every day, but also ready to scale up to handle a major disaster on a moments notice.

Our level of safety is directly proportional to how ready our local responders, emergency managers and health care institutions are to handle all hazards of any scale.

As many of you are familiar, the National Response Framework (NRF) is designed on the premise that state and local first responders will be the first on the scene. For it to be successful, it is essential that the state and local preparedness and response efforts are seamlessly integrated into the Federal planning system.

However, a biological agent such as aerosolized anthrax would contaminate many of the responders rushing to the affected areas. Many of them do not have the proper training to respond to a bioterrorism. In turn, many of these rescuers would become victims themselves.

In other words, it doesn't much matter what we do at in Washington, D.C. at the Federal level if the states, cities and local first responders are not adequately prepared and ready to do the job, from the entire end-to-end capability: threat awareness, detection to response and recovery.

Biodefense Strategy:

Preventing and detecting a biological release ahead of time can be a very daunting task, as such, the Department of Homeland Security is working to implement a comprehensive, end-to-end planning strategy to not only prevent an attack, but to respond if and when one occurs.

The end-to-end planning for biodefense is encompassed in the four pillars of our Nation's biodefense strategy: 1.) Threat Awareness; 2.) Surveillance and Detection; 3.) Prevention and Protection; 4.) Response and Recovery.

Threat Awareness:

Threat awareness involves developing and maintaining intelligence sources, and as I stated earlier, al Qaeda has expressed a strong interest in acquiring and using anthrax as a biological weapon on a large-scale.

Prevention of a biological attack, such as anthrax, is very difficult because it's very hard to detect/screen ahead of time (unlike explosives or radioactive materials), it's readily available and naturally occurring in other part of the world, and does not require a very high-level of sophistication to produce and weaponize.

The Department of Homeland Security is doing a lot in the area of threat awareness. The Office of Health Affairs works closely with the Office of Intelligence and Analysis, who in turn work with the broader Intelligence Community, as well as law enforcement at the state and local levels.

The Department is working closely with State Fusion Centers to monitor and integrate threat information – with 58 Centers around the country the Department has provided more than \$254 million from FY 2004-2007 to

state and local governments to support these Centers.

Fusion Centers are critical to our mission of preventing an attack from happening in the first place. Good intelligence information is really the only method we have today to stop a biological attack from happening in the first place.

Surveillance and Detection:

Having a link between your UASI jurisdictions and the Fusion Centers is critical to developing a full picture of the current threat levels from the Federal and state and local levels.

Because bioterrorism is so challenging to prevent it is vital that our detection and surveillance capabilities are adequate. In the case of an aerosolized anthrax attack, early detection is paramount. Once an attack occurs, the opportunity to get life-saving medications into the mouths of the people is a very small window. 48-72 hours after a release is critical. Every hour or day that passes could potentially cost the lives of tens of thousands of people.

The Department's BioWatch program is an early-warning detection system against the release of aerosolized biological agents, including anthrax, plague, smallpox, tularemia and brucellosis.

There are BioWatch detection capabilities in over 30 of our Nation's largest cities, including the UASI jurisdictions, and we are moving as fast as possible to develop Generation 3 BioWatch detectors to become automated with significantly reduced detection times. This would allow for the distribution of life-saving countermeasures to begin as rapidly as possible.

The Department is also operating the National Biosurveillance Integration Center (NBIC) to develop a coordinated and integrated common operating picture for biosurveillance, analyzing data from human and animal health, plant, food, water and environmental systems.

Receiving information from state and local jurisdictions and the private sector will be a crucial aspect in order to create a more comprehensive understanding of the current biological threats we face at the earliest stages.

Protection and Prevention:

The Department also has a significant responsibility to protect the health and safety of the public. A large-scale bioterrorist attack would obviously result in significant medical and public health consequences. The Department of Health and Human Services is the lead Federal agency responsible for providing medical support and healthcare to the public (ESF-8).

As the Federal incident management official, Secretary Chertoff and the Department of Homeland Security are ultimately responsible for the overall incident management, which would include coordinating the medical response, emergency management, evacuations, and protection of critical infrastructures and key resources.

As I mentioned earlier, preparedness and response for a biological attack involves an entire end-to-end system of planning.

Response and Recovery:

This is the last of the four biodefense pillars and certainly involves a great deal of coordination among the Federal, state and local partners.

As one might imagine, responding to an aerosolized release of anthrax in an urban setting, such as downtown Charlotte, Washington D.C., or New York City would be an unprecedented undertaking. This would pose significant challenges on many, many fronts.

The Department of Health and Human Services is responsible for providing medical support (ESF-8) during a biological attack; this is a very large responsibility. HHS is investing billions of dollars to develop and acquire life-saving medical countermeasures for a number of biological agents.

The psychological aspects involved would likely be severe. Without immediately knowledge of the cause, the perpetrators, probability of second attacks, and extend of damage, would need to be addressed at both the national levels and the individual community level where the attack took place.

Health and Human Services/CDC is responsible for deploying the Strategic National Stockpile to the state and local jurisdictions for further deployment to the public.

FEMA is responsible for developing national response planning and for providing emergency disaster workers, whether it's a natural disaster or bioterrorism.

Part of the planning process involves determining certain protections and procedures that first responders must take in order to avoid becoming part of those in need of rescue. As you all keenly know, the first responder culture is to rush in and ask questions later, which is good. But, during an anthrax attack or other biological incident, certain precautions must take place to avoid serious injuries or death to the responders.

In response to a biological attack, such as anthrax, the Environmental Protection Agency would be responsible for determining whether an area is safe from environmental contaminants, such as anthrax spores. Decontamination would be a major undertaking after an aerosolized anthrax attack. Virtually everything – the air, buildings, cars, people, streets, etc. would be contaminated with spores.

The Department of Justice would be the lead agency responsible for preventing second attacks by isolating the source of the crime and collecting evidence to determine suspects.

These are just a few examples of specific responsibilities, involving multiple Departments and agencies working together with state and local officials.

Planning:

Because all events are local it is critical that there are integrated roles and responsibilities at all levels of government. I have mainly focused on the Federal role thus far. But, if there's one message that I'd like you to take away it is that having a coordinated plan of roles and responsibilities for local first responders, the mayor, state officials, and the Federal government.

Given all the roles and responsibilities involved, this is always a challenging endeavor. But, in my opinion it is paramount to ensuring a rapid and adequate response to catastrophic events.

Many of you are familiar with the 15 National Planning Scenarios (10kt nuclear device, aerosolized anthrax, pandemic influenza, chemical attacks, FMD, etc.).

It is the Federal Government's responsibility to develop and define the high-level planning parameters, including the Strategic Plan. The Federal government establishes the architecture for the plan – the states and locals develop the operational plans from it.

But, the Federal government is not going to require the states and locals to have specific equipment or the supplies to include in a medical preparedness kit.

It's the states and locals job to identify gaps in their particular plans and to develop Operational planning to identify their specific roles and responsibilities "on the ground" during a catastrophic event.

We still owe you the Strategic Plan for aerosolized anthrax. Given that this is a very significant threat – #1 on our biological threat list – developing this high-level plan is something that should get done quickly.

Grants Coordination:

Having a Strategic Plan will greatly assist your jurisdictions and regions in determining your resource needs.

One area of particular concern for us at the Federal level is ensuring that preparedness grants to local jurisdictions are well coordinated. This is something that we've heard from you, loud and clear.

We need to do a better job of coordinating these funding streams to ensure a more unified approach to developing preparedness standards and metrics.

Our goal is to ensure that preparedness and response grants are well-coordinated, whether it's UASI funding, MMRS, or HHS Bioterrorism and hospital grants.

We are making progress in this process and working closely with FEMA, HHS and others to ensure there is a more streamlined funding approach, and it's not just an exercise of buying various types of equipment and apparatus, but a clear direction in enhancing preparedness with standards and benchmarks.

In fact, FEMA has assured me that their grant guidance is flexible enough to allow for preparedness activities for these biological threats. If you disagree and have concerns, please let me know.

Conclusion:

We are continuing to make strides in developing a national level of preparedness. It requires the help of each of you to make it happen.

I've laid out some very real scenarios on the biological front. We know that the enemy has the desire. We know that the enemy has a preferred choice of biological agents. We also know that developing an aerosolized form of anthrax to disperse over an urban-setting is not that hard to accomplish.

That's why we need to continue to develop our partnerships at all levels of government and produce the necessary planning and preparedness of the public.

Because prevention of a biological attack is such a challenge, we, as a nation, need to be ready to respond immediately and swiftly if and when bioterrorism strikes.

Thanks for all that you do. Please continue providing us with your feedback. DHS would like to hear from you. You can reach my Office of Health Affairs at healthaffairs@dhs.gov

###

This page was last reviewed/modified on April 21, 2008.