

Intersectoral and International Cooperation on Combating Bioterrorism

Marc L. Ostfield , Senior Advisor on Bioterrorism, Biodefense, and Health Security

Remarks at NATO Conference on Elements of Combating WMD Terrorism

Warsaw, Poland

September 14, 2005

Office of International Health Affairs

Bureau of Oceans and International Environmental and Scientific Affairs

More than sixty years ago, Winston Churchill spoke at Harvard University of our shared transatlantic responsibility to "faithfully serve great causes." Now, five years into the 21st Century, it is clear that our collaboration to combat terrorism particularly terrorism involving Weapons of Mass Destruction – is indeed one of those causes.

Counterterrorism and WMD

It is a pleasure to be at this NATO conference with its explicit emphasis on international and intersectoral cooperation. U.S. efforts to combat WMD terrorism are inherently international in scope. Defeating terrorist organizations, preventing terrorist use of WMD, and enabling effective response and mitigation all require sustained, steadfast, and systematic international partnership.

The trend away from centralized planning of terrorist activities and towards inspiration of local groups to commit acts of terror makes even more crucial the need for deeper international cooperation to defeat emerging violent extremist groups. The United States and its partners must intensify current efforts to bolster the political will and the intelligence, law enforcement, financial, health, agriculture, scientific, and military capabilities of partner nations to combat terrorism on their own or in partnership with us. No single country can successfully deal with WMD terrorism all on its own, but together we will prevail.

Combating Bioterrorism

Bioterrorism presents probably the most intersectoral and international challenges among the various WMD threats. Bioterrorism differs from nuclear or chemical terrorism in a number of significant ways in its lack of geographical boundaries, in the silence of its attack, in its potentially unclear intent and difficulty in identifying perpetrators or even whether an attack has actually occurred, in its potential non-specificity of symptoms, in its toxicity and relatively low cost of production, in its ease of replication (the "reload" factor), in the role of health workers as the first responders (as opposed to military or law enforcement), and in its inhibition of traditional social responses of community outreach and solidarity. These differentiating characteristics, then, raise a number of distinct international policy implications.

WMD, CBRN, and other Acronyms

One of the issues in discussing the foreign policy implications of bioterrorism is that our penchant for acronyms can end up creating a sort of "alphabet soup" that muddles the issues. Rather than recognizing the critical differences between nuclear, chemical, and biological attacks, we frequently lump them together into categories like "CBRN" or "WMD." The lexical merger of these very distinct forms of attack makes it seem as if bioterrorism is merely another variant on a basic theme. In many instances, discussions about biological terrorism sometimes mimic the thinking about responses to nuclear or chemical terrorism as if these several threats only involve different formulations of the same fundamental weapon. Yet biological terrorism differs markedly in production, attack methodology, prevention, preparedness, and protection from the nuclear and chemical terrorism with which it is often grouped.

In particular, one of the drawbacks of the term "WMD" is that it seems to make the military, law enforcement, and intelligence agencies predominantly responsible for defense against bioterrorism, rather than recognizing that prevention and response will need to be truly multi-sectoral with critical and leading roles played by the public health, agricultural, and environmental sectors of our governments and our economies. This intersection of multiple sectors, though, is indeed successfully illustrated in the themes of this NATO conference stressing civilian-military interoperability, and in the recent Interpol conference on bioterrorism emphasizing the critical and necessary linkages between law enforcement and public health.

Pillars of Effective Multi-Sectoral and International Efforts

The four essential pillars of effective and cooperative global and multi-sectoral efforts to combat bioterrorism are:

1. **Threat Awareness** – including bioterror-specific intelligence, timely assessments, and strategies for anticipating future threats.
2. **Prevention and Protection** – including proactive prevention activities and counterproliferation efforts, along with

- critical infrastructure protection.
3. **Surveillance and Detection** – including early detection and attack warning; disease diagnosis, identification, and the ability to discern unusual patterns of disease; epidemiological investigation to determine the extent and cause of the outbreak; laboratory testing to confirm the disease agent; provision of information regarding the outbreak to key stakeholders; attribution, and interdiction.
 4. **Response and Recovery** – including response planning, provision of treatment and the ability to contain the outbreak through focused public health intervention, mass casualty care, risk communication, medical countermeasure development (drugs and vaccines) and distribution, decontamination, and recovery from the immediate and long-term effects of the outbreak.

Each of these elements requires input, skill, and guidance from a range of sectors including military, law enforcement, intelligence, public health, agriculture, environment, and science. And, to be effective, all of these elements require sustained cross-border collaboration.

U.S. National and International Initiatives

The United States has pursued a broad range of national and international programs and capabilities to combat bioterrorism and strengthen biodefense. Among our significant accomplishments, we have:

- Worked with the international community to strengthen global, regional and national programs to prevent, detect, and respond to bioterror attacks, through increased biosurveillance, international laboratory cooperation, strengthened protection of agriculture and food supply systems, and enhanced global mitigation and response capabilities. International initiatives include *bilateral counterterrorism efforts* incorporating collaboration on bioterrorism; U.S. multi-sectoral, ongoing work through the *G-8 Bioterrorism Experts Group*; the *Global Health Security Action Group* coalition of Health Ministers working together to combat bioterrorism; *international antiterrorism training* on WMD response; health security efforts under the auspices of *APEC*; and 30 different bilateral and multilateral science and technology agreements to facilitate international scientific exchange of research results.
- Continued strong U.S. support for the work programs of the Biological Weapons Convention focused on pathogen security, national legislation, disease surveillance, and scientific codes of conduct.
- Developed and enhanced diverse programs to limit the international proliferation of bioweapons expertise and facilities.
- Supported other nations in developing strategies to manage the consequences of a bioterrorist attack, most recently in our collaboration with Greece in the preparations for the Olympic Games in Athens.
- Designed and implemented multi-nation exercises such as *Silent Twilight* and *Global Mercury* to improve global bioterrorism response communication and cooperation.
- Established the BioWatch program, a network of environmental sensors to detect biological weapons attacks against major cities in the United States.
- Initiated new programs to secure and defend U.S. agriculture and food systems against biological contamination.
- Increased funding thirty-fold for U.S. Government-funded bioterrorism-related research.
- Supported development of the World Health Organization's Global Smallpox Vaccine Reserve contributing 20 million doses (the largest single contribution) to this important international stockpile.
- Launched and funded Project BioShield in the U.S. to speed the development and acquisition of new medical countermeasures against bioterrorism.

U.S. and Europe: Differing Perceptions of Bioterror Threat

In my international travels, I often hear skepticism about U.S. perceptions of the threat of bioterrorism or of the needed actions. The degree to which bioterrorism is seen to be a significant security threat affects our individual and collective willingness to invest resources in biodefense. And the nature of each other's threat assessment will help structure the kinds of programs put in place to defend against bioterrorism.

Of course it is not necessary for the United States and Europe to have identical perceptions and assessments of the threat of bioterrorism in order to collaborate successfully. History is full of situations where parties with differing perceptions or objectives have worked together on common interests and goals. Because combating bioterrorism is too inherently international a problem for any one nation or sector to solve alone, it is vital that we identify those areas where we do agree and build programs from there. We need to acknowledge that assessing the threat – not to mention coming to some agreement on the assessment – is complicated both by the (very fortunate) paucity of actual historical or intelligence information regarding bioterrorism, and by the limitations that we would face in using such information even if we had it.

NATO is already well underway in fostering this transatlantic collaboration on combating bioterrorism. Since 2002 when NATO's Prague Summit developed the Defense Against Weapons of Mass Destruction Initiative, NATO has created five specific initiatives to help deal with chemical and biological weapons, including a deployable nuclear, biological, and chemical (NBC) analytical laboratory; an NBC event response team; a virtual center of excellence for NBC weapons defense; a NATO biological and chemical defense stockpile; and a disease surveillance system. These initiatives help strengthen our combined abilities to thwart the threat of bioterrorism. Recognizing the intersection of military and civilian

protection efforts, NATO has also created the Protection of Civilian Populations Initiative to improve civil preparedness against, and manage the consequences of, possible bioterrorist attacks. An important step in this initiative was the development of the Civil Emergency Protection (CEP) inventory, an inventory of national civil and military capabilities that could be made available to assist stricken nations – a critical element of international cooperation.

Combating Bioterrorism Benefits Global Health

Even if nations do not see completely eye to eye on the importance of combating bioterrorism, there is an additional and very compelling argument for sustained and enhanced international collaboration on these efforts. The essential pillars I have described here – awareness, prevention and protection, surveillance and detection, response and recovery, have the added benefit of simultaneously strengthening global health protection overall. Virtually everything we do to defend against bioterrorism – improving disease surveillance and detection systems, enhancing cross-border communication, facilitating international laboratory cooperation, and developing mechanisms for international sharing of medical countermeasures, for example – benefit all of us in the event of a naturally-occurring outbreak or a bioterror attack. As the growing concerns about avian and pandemic influenza make clear, international cooperation is absolutely critical to any effective strategy for national and global preparedness, prevention, containment, and response.

Awareness of this fortunate synergy of efforts is not new. After the SARS outbreak in 2003, for example, a CIA-sponsored panel of experts concluded that "the early containment of SARS in the U.S. was greatly facilitated by existing bioterrorism preparedness measures." Both naturally-occurring outbreaks and bioterrorism point the way toward a clear recognition of the complexity of the health, economic, political, and security threats posed by disease and the need for strong links between health, agriculture, and security sectors, and between domestic and international actions.

A great challenge of the 21st century is to prevent the deliberate use of disease as a weapon from killing millions, destabilizing economies and disrupting societies. The great security opportunity of this new century is to eliminate massively lethal epidemics of infectious disease by ensuring that biodefense – humanity's timeless struggle to prevent and defeat disease – is far more potent than the inevitable attempts to create and use bioweapons.

Key Recommendations

Based on all of this, I have seven key recommendations for our individual and collective international and intersectoral efforts to prevent and respond to bioterrorism:

1. Strengthen national and international abilities to identify and quickly detect unusual outbreaks which could indicate a bioterrorist attack and rapidly share that information with appropriate national and international policymakers.
2. Improve multi-sectoral interoperability between biodefense, military, law enforcement, health, environmental, and agriculture agencies to combat bioterrorist threats to transatlantic security. Develop, promote, and conduct regular transnational, multi-sectoral training courses and exercises on preventing, preparing for, containing, and responding to bioterrorism.
3. Increase the selection of countermeasures available and develop effective national *and international* mechanisms to distribute and share countermeasures to slow or stop the spread of a deliberately released pathogen.
4. Plan *now* for international, multi-sectoral cooperation because local and national responses will likely not be sufficient.
5. Develop civilian-military interoperable systems that prepare for the "reload" aspect of bioterrorism. Find ways that military skills and strategies can best adapt to the asymmetrical nature of bioterrorist attacks because it is harder to protect civilians in everyday life than military personnel on the battlefield.
6. Recognize that it is in the explicit interest of nations that their neighbors and allies are able to prevent and, if necessary, contain and respond effectively to large epidemics. Uncontrolled contagious disease in other nations will spread across borders, with great potential to threaten populations, disrupt societies and destabilize economies.
7. Develop and test effective risk communication strategies. People need to make sense of random and terrifying events, but epidemics elude quick and easy explanation thus presenting an unprecedented challenge for policymakers both nationally and internationally.

Taken together, these seven steps can enhance our collective defenses against bioterrorism. Investing in these actions makes the world a safer, healthier place and the investment pays off in overall improvements to global health even if there is never a bioterrorist attack. We fight terrorism because we must and we work collectively to seek a better world because we can. That is why we devote ourselves to democracy, development, global public health, human rights as well as to the structure of global peace that enables us to pursue our vision for a better world. These are not mere high-sounding rhetorical trimmings for our interests. These are our interests. They are the purposes that our collective power serves. It's been an honor speaking to you today. Thank you.

Released on November 8, 2005

