

PIR Conference: Panel on Biological Security: Prospects for International Cooperation

I. Introduction

Some of you may recall a famous story attributed to the British playwright and social commentator George Bernard Shaw. According to the story, Shaw was approached by an acquaintance who had received an invitation to address the Royal Academy of Sciences, but was given only 3 minutes for his talk. How, he asked Shaw, could he convey everything he knew to the Academy in only 3 minutes. Shaw's advice was "Speak slowly."

I am very tempted to follow Shaw's advice at this very prestigious gathering where I have been asked to speak as well as moderate, at a panel on a topic rather far removed from my expertise, which is very much in the nuclear rather than biological weapons area. Nevertheless, let me try to raise a few issues that are relevant to the topic of "Prospects for International Cooperation on Biological Security" and then call upon the true experts on the subject to make their presentations.

II. The Global Partnership and Biological Weapons

When I first learned that I was to address the issue of the Global Partnership and Biological Security I thought that perhaps I had been given that assignment because there was so little to say about the Partnership's activities in this area. Regrettably, that is not far from the truth. Indeed, although the G-8 pronouncement at the Kananaskis Summit in June 2002 pledged to raise and expend \$20 billion to prevent terrorists, or those that harbor them, from acquiring or developing nuclear, chemical, radiological and *biological* weapons; missiles; and related materials, equipment, and technology, very little work has been accomplished in the BW area. Indeed, as best I can discern, practically nothing is being done on biological security issues except in the United States. France is making a very modest contribution while Canada, the United Kingdom, and Sweden are providing or have pledged small amounts to the International Science and Technology Center (and the STCU) for work that may include biosecurity issues.

To be more specific, of the 750 million Euros pledged to the Global Partnership, France has committed 5 million Euros for work on biological issues (cryptically identified in the public accounts I could find as funds for "security renovations at highly sensitive Russian laboratories"). According to the *2003 First Annual Report by the United Kingdom on the G-8 Global Partnership*, the UK had expended 20,000 pounds in 2002-2003 for preparation of its first BW project proposal involving a plant health institute in Georgia, and projected expenditures for another 200,000 pounds for the project in 2003-2004 (p. 24). I have been told by a colleague at CSIS that this money subsequently has been redirected to the ISTC. For its part, Sweden has committed 950,000 Swedish Kroner (or about \$130,000) to bio-safety and biosecurity projects out of a total Global Partnership pledge of 10 million Euros, while Canada has pledged 18 million dollars/year for five years to the ISTC, some portion of which may be directed to BW projects. Finally, of its ten year \$10 billion pledge to the Global Partnership, the United States has committed approximately \$55 million to enhance the protection of biological facilities in the former Soviet Union, and an additional \$10 million to redirect former BW scientists [Daniel Kobayakov, "A View from Russia" in *Global Partnership Update*, March 2004, p. 3]. In my paper I provide more detail on U.S. funding for programs to prevent biological weapons proliferation and terrorism. Here let me simply note a point to which I will return shortly, that a very important dimension of the U.S. biological weapons proliferation prevention program is work being done in Central Asia.

III. Why So Little Activity?

It is possible that my figures are not perfectly up to date and that there may be a slow but positive trend in Global Partnership commitments to and expenditures for biological security issues. Nevertheless, to date, far less than one percent of the funds pledged to the Global Partnership have been committed to BW issues, and one must ask what accounts for this bleak situation.

One can identify at least six reasons why so little money has been pledged and so few activities have been undertaken. I would group them into the categories of "high politics," "low politics," limited expertise, the low salience of the issue, a fixation on Russia, and a lack of creativity.

The most obvious obstacle to more assistance and the one most often cited by Western analysts involves the politics of biological weapons, the secrecy surrounding them, and suspicions about the degree to which Russia, in particular, has been forthcoming about its past activities and is in compliance with its BWC obligations. These suspicions are not eased by Russian refusal to allow Western access to biological institutes run by the Ministry of Defense.

In addition to these so-called problems of "high-politics," efforts to expand cooperation in the biosecurity sector have been impeded by bureaucratic inertia and the force of standard operating procedures – typical features of organizations when they confront circumstances with which they are not familiar. And, indeed, for most countries, the issue of biological weapons is a remote and esoteric topic understood by few government

experts, commanding little attention by senior policymakers, and perceived by the political leadership as having little, if any, domestic political impact or constituency. Given the low salience of the issue and the limited body of experts, even among the nonproliferation community within and outside of governments, it is not surprising that funding for BW nonproliferation activities lags well behind that for nuclear nonproliferation projects. Also contributing to this funding picture is the tendency for the participants in the Global Partnership to pledge funds for activities they already were undertaking or had planned. Since little work was being done on biosecurity issues before the creation of the Global Partnership, it is understandable, although unfortunate, why little work has been initiated since its creation.

An additional, less obvious reason for the low expenditure of Global Partnership funds on BW projects is the fixation by most Global Partners on Russia to the exclusion of other post-Soviet republics. This is exceptionally unfortunate and dangerous from the standpoint of weapons proliferation, brain drain, and bioterrorism given the large numbers of highly trained BW scientists and large stock of BW pathogens currently residing in a number of the non-Russian successor states. To date, only the United States has taken much interest in this problem, and its intervention, although significant, is both late and inadequate.

Finally, for purposes of my list, I would argue that almost all parties have been very rigid in how they have defined the nature of the BW problem and uncreative in selecting tools and strategies to ameliorate it. In particular, we have tended not to place enough emphasis on the relationship between disease surveillance, epidemiological response and bioterrorism preparedness, to invest adequately in enhancing public health as a cost-effective bioterrorism prevention strategy, or to utilize nonproliferation education and training as powerful tools to combat the spread and use of biological weapons.

IV. What Is To Be Done?

It is, of course, easier to call attention to the many facets of the problem than to propose recommendations that are both innovative and practical. I will limit my suggestions for next steps to four, which I believe at least meet the test of practicality.

1. Emphasize Consolidation

My favorite mantra or principle in the realm of nuclear material protection, control, and accountability is secure, consolidate, and eliminate. I believe at least the first two parts of this nonproliferation formula is equally relevant to the BW realm. The formula, however, is not being implemented in a timely or systematic fashion, and far too many sites in too many countries possess inadequately protected dangerous pathogens. A good example is the Belarus Research Institute of Epidemiology and Microbiology in Minsk, which holds – precariously – some of the world’s most dangerous viral agents. Rather than invest heavily in providing biosecurity upgrades at this site, the material should be removed to a more secure facility elsewhere. Given the political difficulties the United States is likely to have in directly facilitating this removal effort, it would be of enormous value were an EU member such as Sweden to cooperate with Russia in arranging for the safe shipment of the pathogens from Belarus to Russia. As an incentive for Belarus to give up its deadly pathogens, the EU, Sweden, or a pair of Global Partnership countries might offer to re-equip the Belarus lab as a CDC-like public health diagnostic laboratory. This kind of approach would serve the dual purpose of consolidating dangerous pathogens and enhancing disease surveillance and public health capabilities in Belarus. This approach, which could usefully be applied to many other sites throughout the former Soviet Union and beyond, also could help to realize the promise of nonproliferation cooperation implied but too often unfulfilled by the phrase “Global Partnership.”

2. Greater Focus on Central Asia and the Caucasus

As was the case in the nuclear sector, international attention to the proliferation risks posed by BW expertise and pathogens in the non-Russian republics came too little too late. As a consequence, although the United States has begun to implement various biosecurity and biosafety projects in Kazakhstan and Uzbekistan, and has plans to expand these activities to Georgia, there is tremendous room for greater Global Partnership involvement in these efforts and also comparable activities in countries such as Tajikistan, Ukraine, Belarus, Armenia, Azerbaijan, Kyrgyzstan, and Turkmenistan. Although the size and nature of BW expertise, infrastructure, and stocks of pathogens varies widely across these states, each of them hosts a variety of biomedical facilities which were connected to the network of Soviet Anti-Plague Institutes. This network in the late 1980s encompassed six institutes and approximately 200 regional and field stations scattered throughout the Soviet Union. Among the specific tasks that other Global Partnership states might undertake at these sites outside of Russia, in addition to consolidating dangerous pathogens at fewer sites in fewer countries as much as possible, are:

- Upgrade the biosafety and biosecurity of microbial collections and research facilities to reduce the risk of accidental infections and the potential for theft or diversion of dangerous pathogens
- Strengthen systems for epidemiological surveillance of both human and veterinary infectious diseases at the Anti-Plague Institutes
- Explore the feasibility of better integrating the disparate disease surveillance systems operated by the Anti-Plague Institutes, the military, and other agencies, which are poorly coordinated
- Computerize the voluminous paper archives at the APIs that contain historical data on past disease outbreaks in order to create searchable databases that could serve as valuable epidemiological research tools.

3. Greater Access in Russia

As noted previously, concerns on the part of some Western states about Russian compliance with the BWC has been a very contentious issue that has impeded cooperative nonproliferation activities in the biosecurity sphere in Russia. Most unfortunately, these impediments extend to the five APIs in Russia, some of which have been described as a "biosecurity nightmare waiting to happen." As a consequence, unlike the sister institutes in Central Asia, no U.S. Cooperative Threat Reduction or ISTC activities have been planned with Russian APIs. That being said, there are institutional advocates within the Russian government for cooperation in this sphere and it is possible that the Russian Ministry of Health may emerge as a supporter following the recent government reorganization. Until now, however, there have been too many ministries and academies involved in deliberations about biosecurity cooperation and pathogen collection consolidation (no institute wants to part with its collection). What is badly needed is a focal point within the Russian government for biosecurity cooperation.

4. Nonproliferation Education and Training

On November 22, 2002 the United Nations General Assembly adopted without a vote resolution 57/60 entitled "United Nations Study on Disarmament and Non-Proliferation Education," and conveyed the recommendations of the study for implementation, as appropriate, by Member States and other entities. As key principle underlying the UN study is that education is an underutilized tool for promoting both disarmament and nonproliferation. Although a number of Global Partnership states including Japan and Sweden were key proponents of the UN study and helped to draft its recommendations, and despite the fact that all Global Partnership members supported the recommendations of the UN study, a nonproliferation education and training initiative has yet to be launched under the auspices of the Global Partnership. While one can imagine numerous ways in which nonproliferation education could be employed to promote the objectives of the Global Partnership, a good starting point for such an initiative might be to provide nonproliferation training to former BW scientists and epidemiologists in Central Asia and the Caucasus. The APIs and the field stations in the region are in various states of disrepair and insolvency, but the staffs of these facilities include scientists and technicians who are knowledgeable about some of the world's deadliest pathogens and possess unique collections of pathogenic bacterial, fungal, and viral strains. Accordingly, the anti-plague system in the former Soviet Union today has the potential for spawning both harmful and beneficial applications. A Global Partnership nonproliferation education initiative might make the difference in steering this potential in a positive direction.

A possible model for this kind of training program is one my Center in Monterey has employed over the past 13 years, and is also being used to good effect by the PIR Center. In the past year, for example, with the support of the Nuclear Threat Initiative (NTI), CNS organized a nonproliferation training session in Almaty for BW scientists and technicians from Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Tajikistan, Ukraine, and Uzbekistan. It also hosted two scientists from Anti-Plague Institutes in Kazakhstan and Uzbekistan for three months of in-depth nonproliferation training in Monterey.

The potential impact of such nonproliferation training is evident today in the role played by the PIR Center in Russia. NGOs, however, cannot do the work alone. It is now time for the members of the Global Partnership to take the lead in promoting nonproliferation education as a means to enhance biological security and prevent the spread and use of biological weapons.