

**2008 Meeting
Geneva, 1-5 December 2008**

**Meeting of Experts
Geneva, 18-22 August 2008**
Item 5 of the provisional agenda
**Consideration of national, regional and
international measures to improve biosafety
and biosecurity, including laboratory safety
and security of pathogens and toxins**

PATHOGEN SAFETY AND PATHOGEN SECURITY ASSISTANCE EFFORTS OF THE UNITED STATES

Submitted by the United States of America

1. The United States has a long-term commitment to providing pathogen safety and pathogen security globally and has engaged in activities to support this commitment for nearly two decades. Historically, the approach for this type of assistance has been agency-driven with a general coordination of efforts within the interagency. Congress and the Administration support these critical efforts with ongoing, significant funding and policy emphasis.
2. A variety of departments and agencies within the United States government have been involved in these assistance efforts. These include the Department of State, the Department of Energy, the Department of Health and Human Services, including the National Institutes of Health and the Centers for Disease Control and Prevention, the Department of Agriculture, and the Department of Defense.
3. Mandates for these assistance efforts are the result of initiatives at both the Presidential and the Congressional levels. A few of these initiatives include the National Strategy to Combat Weapons of Mass Destruction, a presidential directive issued in 2002; Biodefense for the 21st Century (2004); and the Congressional Nunn-Lugar Cooperative Threat Reduction program, initiated in 1991. Collectively these programs have appropriated in excess of one billion dollars in the biological arena.

4. The goals of the Biological Threat Reduction program are to enhance safety and containment of dangerous biological agents in bioscience facilities, to strengthen capacities to detect and control dangerous pathogens, and to improve understanding and mitigation of biological threats.
5. U. S. pathogen safety and security activities have been wide-spread and numerous. They include laboratory training for personnel, laboratory facility safety and security upgrades, and development and promotion of codes of conduct and practice for safe and security biological laboratories. These efforts have also promoted cooperative biological research between scientists from a wide range of countries and scientists from the United States.
6. Another major thrust of the U. S. assistance effort has been in the development and promulgation of guidelines for best practices for work with dangerous pathogens. This includes funding and technical support to the World Health Organization in the development of its Laboratory Biosafety Manual and its guidelines for biosecurity practices. Additionally, we have funded WHO to develop an extensive "Train the Trainers" program in biosafety and biosecurity, and are currently funding the delivery of that program through the six regional offices of the WHO. We have provided support as well to the Organization for Economic Cooperation and Development (OECD) to develop best practices guidelines for biosecurity of biological resource centers, and are currently supporting the OECD to develop similar best practices for biological risk assessment.
7. The USG has offered a number of workshops around the world on the drafting of BWC implementing legislation and legislation for pathogen security. In addition to assisting States Parties in meeting their obligations under the BWC, these workshops have also helps participants in meeting their obligations under United Nations Security Council Resolution 1540.
8. Other efforts undertaken by the United States include assisting other countries in developing potential early warning systems for potential pandemics and bioterror attacks.
9. The Department of State, through the Bureau of International Security and Nonproliferation's Office of Cooperative Threat Reduction has recently been funded by Congress to develop and implement the Biosecurity Engagement Program (BEP). Congress appropriated \$26 million for 2008-2009 for this program, which funds partnerships between foreign countries and U. S. agencies, non-governmental organizations, universities, and scientific organizations. The program is global in scope, having provided assistance to 44 countries on five continents. BEP is dual-benefit in its assistance; strengthening both enhanced biosafety and biosecurity, and enhanced training of scientists, upgrade of laboratories, and enhanced biosurveillance and disease detection programs. An additional component of BEP is the scientist engagement program that promotes cooperation between scientists around the world. Collectively, these efforts strengthen international security and promote better global health.
10. The Department of State's Office of Chemical and Biological Weapons Threat Reduction, also a part of the Bureau of International Security and Non-proliferation, has provided technical and financial support for the development of guidelines and the promotion of training for laboratory biosafety and pathogen security. Among the initiatives undertaken by this office has been the development of the WHO Laboratory Biosecurity Guidance, collaboration on

the new biosecurity chapter for the Biosafety for Microbiological and Biomedical Laboratories (BMBL), the development of the OECD Best Practices Guidelines for Biological Resource Centers, and the European Standards Organization (CEN) Laboratory Biosecurity Management Guidelines. Additionally this office has funded the development of training materials for the WHO guidelines in biosafety and biosecurity and is currently funding the delivery of that training program.

11. The Department of Energy (DOE), in cooperation with its national laboratories, has been actively engaged in the promotion of biosafety, biosecurity, and biocontainment world-wide. It has funded and promoted enhanced infectious disease diagnostics and control, provided training and workshop in these areas, and has provided assistance in policy, regulatory, and guidelines support. DOE has cooperated with other countries in the development of assessments and analysis of laboratory biosafety and biosecurity.

12. The United States Department of Health and Human Services (HHS) has extended substantial support to other governments through its wide array of programs. HHS has presented regional laboratory biosafety and biosecurity fora in Central America, Africa, and Asia. It has hosted the multi-nation Asian Biosafety and Biosecurity Conference and has supported a WHO project on "Life Sciences Research and Development and Global Health Security. The HHS Centers for Disease Control and Prevention (CDC) serves as a WHO Collaborating Center for Applied Biosafety and Training. CDC also supports enhanced global health through its regional laboratories around the world.

13. The United States Department of Agriculture (USDA) has assisted other countries in enhanced disease surveillance and treatment for both animal and plant health. Among the programs sponsored by the USDA is travel support for global leaders in animal health, biosafety, and biosecurity to participate in an international conference on animal health to be held in Paris later this year. The conference has the goal of promoting training and advice on working safely and securely with highly contagious animal and zoonotic pathogens. USDA is also working jointly with the CDC to develop a biological safety training program for use by all federal response and research laboratories. This training program will be shared globally once completed. USDA also promotes international scientist collaboration through the Department of State's BEP.

14. The Department of Defense (DoD) Biological Threat Reduction Program (BTRP) works with partner governments to improve health and safety in a number of ways. It strengthens the capacity to detect, diagnose, and report bioterror attacks and potential pandemics, consolidates and secures dangerous pathogen collections and research in centralized, secure facilities, promoted improved biosafety practices, and conducts research on characterization and mapping of endemic infectious diseases. The comprehensive BTRP efforts include provision of diagnostic laboratory infrastructure, training, and information technology. BTRP has engaged in Azerbaijan, Georgia, Kazakhstan, Russia, Ukraine, and Uzbekistan and plans to extend its programs to Armenia and other partners this year. Funding to date for the BTRP has been \$576 million.
