

**ASEAN Regional Forum
Workshop on Preparedness and Response to a Biological Event
Manila, Philippines
September 5-7, 2012**

Co-Chairs' Summary Report

1. Pursuant to the 19th ASEAN Regional Forum Ministerial Meeting in Phnom Penh, Cambodia, July 2012, the ASEAN Regional Forum Workshop on Preparedness and Response to a Biological Event was held on 5-7 September 2012 in Manila, Philippines. The Workshop was co-chaired by Assistant Secretary Madeleine De Rosas-Valera of the Philippines, Mr. Nick McCaffrey of Australia, and Mr. Joel Ehrendreich of the United States. This Workshop supported the 2014-2015 focus on preparedness and response under the Biological and Toxins Weapons Convention (BWC), as called for in the Workshop proposal, and demonstrated the value and importance of coordination with the biosecurity, biosafety and other related cooperation efforts of the BWC community.
2. The Workshop was attended by representatives and experts from Australia, Brunei Darussalam, China, European Union, India, Indonesia, Japan, Lao PDR, Malaysia, Mongolia, Myanmar, Papua New Guinea, Philippines, Republic of Korea, Singapore, Thailand, Timor-Leste, United States, and Vietnam. Invited guests represented the World Health Organization, the Asia-Pacific Biosafety Association, and the United Nations Interregional Crime and Justice Research Institute. Participants held the view that the intergovernmental organizations provided valuable international and regional context to the discussions.
3. The three co-chairs provided opening remarks, outlining the history of this series of four yearly ARF workshops in support of the work plan of the ARF Inter-Sessional Meeting on Counterterrorism and Transnational Crime. They highlighted the important role the ARF has played in bringing together regional experts to share information and experiences on biological issues. They noted how international cooperation and implementation of the World Health Organization's International Health Regulations (IHRs) strengthen preparedness and response capabilities. Finally, they asked participants to consider what additional activities would be productive under the ARF.

Early Detection and Response

4. The first panel on Early Detection and Response was moderated by Dr. Carmencita A. Banatin, Director of the Health Emergency Management Staff of the Department of Health-Philippines (DOH-HEMS). Dr. Andrew Hill of the Australian Animal Health Laboratory of the Australian Commonwealth Scientific and Industrial Research Organisation, led off the session describing the role of laboratory biosafety and biosecurity in preparedness, detection, response, and risk mitigation. He stressed that the "ideal" solution of building large-scale labs was rarely practical from financial or

political standpoints and often not truly necessary as good practices in biosafety, biosecurity, risk evaluation, risk communication, and preparedness planning can reduce risk and strengthen the abilities of existing facilities to respond to emergencies. He outlined key technical practices in these areas and stressed that preparedness training should be “WHY based”—if staff understand why procedures are in place, they will more likely be able to understand and react to new situations that might require novel responses. Dr. Hill’s presentation is listed as **ANNEX 1**.

5. Dr. Arnel Z. Rivera, Chief of the Response Division of DOH-HEMS, provided a comprehensive overview of how the Philippine Department of Health has worked to support the equipping and training of Philippine first responders. He stressed that equipping included providing knowledge and education in addition to tools and provisions. He outlined the role and mandate of DOH; the systems, protocols, and guidelines that guide preparedness planning and execution; and specific exercises, trainings, drills, and assistance that MOH provides or supports. He identified six broad areas for strengthening: knowledge/awareness, skills, attitude, logistics (manpower, machines, and money), support systems (plans/protocols), and relationships with partners. He also advised that trainings should lead to the building of effective response teams; that the teams should be sufficiently equipped; that there exist opportunities for on-the-ground simulations to test interoperability; that triggers be identified for requesting assistance; and that there be a mechanism to access external assistance. Dr. Rivera’s presentation is listed as **ANNEX 2**.

6. Dr. William Bower of the U.S. Centers for Disease Control outlined key factors that can help differentiate among natural, accidental, and intentional biological outbreaks. He identified characteristics common to each of the three types of events and provided historical examples to demonstrate the differences among the three. He listed several clues that may indicate an intentional outbreak, including unusually large numbers of cases, high mortality rates, uncommon diseases, or unusual disease presentation. He concluded that rigorous investigation is the key to identifying and understanding an outbreak, that a covert outbreak may not be initially apparent, and that there are certain circumstances that might indicate an intentional release of a biological agent. Dr. Bower’s presentation is listed as **ANNEX 3**.

7. Workshop participants compared experiences in response and preparedness training, and noted that each country has different organizational structures for medical institutions, legal authorities, and first responders, and that they face different kinds of managerial or leadership challenges. They agreed that equipping first responders and laboratories is a costly, but necessary investment. They also noted that the policy, technical, and law enforcement communities need to share a good understanding of biosecurity in order to work together effectively.

Local and National Coordination

8. Ms. Priscilla P. Duque, Civil Defense Executive Officer of the Philippine Office of Civil Defense (OCD) moderated the second session on Local and National

Coordination. Ms. Kate Carley of the U.S. Federal Bureau of Investigation (FBI) opened the session by outlining strategies that the FBI has been taking to strengthen linkages between the scientific and law enforcement communities. She introduced different categories of threats including international terrorism, domestic terrorism, and acts of violence, all of which could involve the use of biological agents. She identified a number of challenges that increase potential risk, including financial constraints on universities, the wide spread use of dual use technologies, developments in synthetic biology, and the growth and spread of amateur biology (do-it-yourself, or DIY biology). She listed a number of activities that the FBI had been undertaking to reach out and communicate with the scientific community and highlighted the valuable insights the community provides in identifying over-the-horizon threats. She concluded that effective biosecurity must balance security and science and entails developing a culture of responsibility and security. Ms. Carley's presentation is listed as **ANNEX 4**.

9. Dr. Hill from Australia provided an overview of an All Hazards approach to crisis management, noting that such an approach utilizes the same principles for all agents and events, covers a wide range of risks, and is easier for training. He stressed that before developing an All Hazards approach, planners must understand risks related to compliance, preparedness, training and resource development, and information management. He outlined specific measures to support an All Hazards approach to detection, treatment, and decontamination. Dr. Hill's presentation is listed as **ANNEX 5**.

10. Dr. Chua Teck Mean of the Asia-Pacific Biosafety Association discussed mechanisms for the implementation of national biosafety and biosecurity programs, stressing that each country in the Asia-Pacific region is different and will require different strategies for implementation. He provided a framework for understanding program development, distinguishing between projects, which deliver outputs, and programs, which create outcomes. He emphasized the need to strive for balance among all relevant disciplines, called for inclusive interagency collaboration, and noted that the weakest component will determine the strength of the overall program. He identified six keys characteristics of successful and sustainable biosafety/biosecurity programs: collective ownership, collective responsibility, a realistic business plan, relevant activities focused on the goals of the program, flexibility to adapt to new conditions, and being responsive to the collective biosafety/biosecurity interests of the community. Dr. Chua's presentation is listed as **ANNEX 6**.

11. Dr. Vito Roque, Jr. of the Department of Health-Philippines provided a case study of the Philippines response to the 2008-2009 outbreak of the Ebola Reston Virus, which included both human and pig cases. He outlined the progression of the outbreak and the specific actions that the Philippines took in response, including notification and cooperation with international organizations (FAO/WHO/OIE), development of specific lines of defense, and execution of management imperatives, including limiting the spread of the virus in animal and human populations, protecting animal handlers, and protecting consumers. The experience demonstrated that there still remains much to learn about the cycle of transmission of the Ebola Reston Virus and led to the creation

of an interagency committee on zoonoses. Dr. Roque's presentation is listed as **ANNEX 7**.

12. Prof. Shuji Amano of Nagasaki University presented on Japan's efforts for strengthening efforts to counter biological threats, including specific actions Japan has taken on medical countermeasures, joint exercises by national and local governments, and research and development activities by Japanese ministries. He noted several key challenges to strengthening biodefense: lack of threat assessments, lack of comprehensive strategies, lack of cross-sectoral coordination, lack of efforts to promote international collaboration, and lack of BSL4 capacity. He outlined how Japan has responded to these concerns by initiating the Project for Creating an Interdisciplinary Platform for Biodefense, currently based at Nagasaki University, which has worked to consolidate knowledge through creating a wide network of experts, including international partners and government, university, and private sector communities. The project has seminars and symposia on a range of topics, including issues related to biosecurity. Prof. Amano's presentation is listed as **ANNEX 8**.

13. During discussion, participants shared views on how to secure dedicated funding for biosafety/biosecurity, challenges working with donors that had narrow goals, and the need to keep national goals simple and achievable and advance work in a step-by-step process. They stressed the need to include stakeholders at all levels, including personnel in the field. They also discussed the growing importance of collective leadership as advances in technology and education raise the awareness of all individuals on challenging issues and encourage them to be active stakeholders.

Regional and International Coordination

14. Mr. Shaun Hayeslip of the U.S. Department of State moderated the third session on Regional and International Coordination. Dr. Hill from Australia presented on the function and operation of European Community (EC) Health Crisis Management systems, identifying key entities responsible for emergencies involving biological agents, important reporting and monitoring tools, and the structure of health crisis management. He listed key benefits to this regional approach, including the ability to centralize policy and expertise, provide agreed public messaging, and communicate effectively across the region. However, he warned that these characteristics risk becoming drawbacks, including devolving to a one-size-fits-all policy, sanitized information, dependency on non-national expertise/loss of local expertise, and an undue focus on outside issues. Mr. Hayeslip's presentation is listed as **ANNEX 9**.

15. Dr. Chin Kei Lee, Team Leader for Emerging Disease Surveillance and Response of the Division of Health Security and Emergency of the World Health Organisation (WHO) Western Pacific Region discussed the history of the development of the WHO International Health Regulations (IHRs) and the Asia Pacific Strategy for Emerging Diseases (APSED) and noted important updates and changes in the 2005 revised IHRs and the APSED 2010. He stressed that the APSED 2010 had been updated to address all public health emergencies and to reflect lessons learned and concerns of regional

countries. He also provided an update on the status of implementation and anticipated that minimum capacities will be in place in 2012, five years after the IHRs entered into force in 2007. He noted through implementation of the IHRs and APSED, we hope to reduce the number of unknown unknowns. Dr. Lee's presentation is listed as **ANNEX 10**.

National Efforts on Preparedness and Response

16. Representatives from Thailand, Vietnam, Indonesia, the Philippines, and India outlined their health care systems, shared their respective efforts to strengthen preparedness and response systems, and provided case studies detailing national responses to specific biological incidents. These presentations outlined national strategies, administrative structures, legal authorities and regulations, varying roles of government institutions, mechanisms for early warning, the roles of laboratories, and capacity building through trainings/workshops/exercises. They described how the perception of biorisk had evolved with the emergence of novel highly infectious diseases, advances in biotechnology, and the increase in transnational terrorism. They noted the value of a comprehensive risk management strategy and a One Health approach that addresses the broad spectrum of human, animal, and environmental health; is multidisciplinary/multisectoral; and incorporates all stakeholders from government, private, and academic communities and across all levels of government. Participants noted the value of international cooperation and information sharing, bilaterally, regionally through ASEAN and ARF, and internationally through intergovernmental organizations and regimes such as the Biological Weapons Convention. Participants also highlighted the need for high-level policy commitment, strong collecting leadership, and effective networks for sharing information. The country presentations are listed as **ANNEXES 11-15**.

17. The representative from the European Union provided an overview of the EU's Chemical, Biological, Radiological, and Nuclear Centres of Excellence Initiative (CBRN CoE), detailing the policy framework, goals, structure, and work of the CBRN CoEs. CBRN CoEs are currently being set up in five regions, including Southeast Asia, with plans for three more. He stressed local ownership and that the activities of each CBRN CoE will be tailored to the needs of the individual regions. He also noted how the CBRN CoE in Southeast Asia will support existing regional and international efforts including the G8 Global Partnership and the work of ASEAN and the ARF.

18. The presentations and discussion among participants raised several concerns and challenges. Echoing previous conversations, participants noted financial limitations that prevented health investment and concerns that ongoing projects currently funded by donors may not be sustainable over the long term. Participants noted that during previous biological incidents, countries had encountered problems with an insufficient supply of reagents, shortages of qualified personnel, and being overwhelmed with samples. Participants noted the need to continue to update regulations and legal authorities in order to provide sufficient detail and guidance and the need to raise the quality of laboratories or incorporate new technologies for rapid detection, research, and

surveillance. Some participants recommended the designation of national focal points for biological issues within the ARF and the sharing of national plans of action.

Exercising Preparedness and Response

19. Colonel Cheon Myoeng Guk, Chief of WMD Verification of the Ministry of National Defense (MND) of the Republic of Korea, shared a short video detailing the Able Response 2012 Exercise carried out by the ROK and the United States. The scenario for the tabletop exercise detailed a multiple-target terrorist incident involving tularensis, and brought together over 230 participants from 60 organizations in the Korean and U.S. governments. Colonel Cheon outlined several challenges, including bureaucratic resistance, difficulties in achieving interagency consensus, and insufficient training to implement existing guidance. During discussion, participants noted the importance of incorporating all stakeholders early in planning in order to secure buy-in and robust participation, the need for strategic risk communication and media management strategies to counter rumors, and the importance of considering how policies might have unintended consequences on the economy or the morale of law enforcement and public health professionals. Colonel Cheon's presentation is listed as **ANNEX 16**.

20. Dr. Edith S. Tria of San Lazaro Hospital led a multistage table-top exercise as a demonstration on how to exercise relationships among public health agencies and healthcare partners at all levels of government in response to a pandemic influenza outbreak. Through the scenario detailing an H5N1 outbreak, participants considered surveillance practices, command and control structures, multi-sectoral agency roles and responsibilities, strategic communication, key epidemiological steps, crisis management including surge capacity, and vaccine policy. Participants practiced completing a self-assessment to identify weaknesses and using the assessment to develop an action plan to address those weaknesses.

21. During the exercise, participants observed the need for dedicated trainings for management level personnel, mechanisms to share information between the field and management. Recognizing the importance of Ministries of Health in domestic preparedness and response, participants asked about what networks currently exist among such Ministries in the region. Participants noted the challenge of strategic risk communication that includes all sectors and agencies of government. Participants noted national level concerns related to guidance for biosafety and biosecurity and need for training for health care providers and first responders.

Working Group Discussions

21. The workshop participants divided into three working groups to discuss specific aspects of preparedness and response. Working Group One addressed biosafety and biosecurity measures as preparedness for a biological event, particularly with respect to an intentional incident. Participants discussed the types of measures worth highlighting and further reinforcing, including physical security and access control, personnel suitability and reliability, the need for a graded approach based on the risk assessed,

and the need for added attention to the animal and plant sectors. Working Group One also examined the difficulties involved in moving beyond initial training, including the resources needed to ensure best practices are being followed, regulations are being implemented, and auditors are taking appropriate action.

22. Working Group One participants agreed that strengthened biosafety and biosecurity practices are essential to mitigate the risk of an accidental release or the intentional misuse of pathogens. Having established protocols and procedures in place prior to an event is essential, and participants recommended examining biosafety/biosecurity guidelines developed by the World Health Organization as a useful reference point in seeking further background information. Participants concluded that a holistic approach continues to be needed in many countries, with clear lines of authority, command and control, responsibility for developing regulations, and methods for bringing multiple sectors into the decision-making process. Full presentation of Working Group One's conclusions is listed as **ANNEX 17**.

23. Working Group Two addressed national coordination, including local and national public health, animal health, and law enforcement communities. They discussed the need to integrate local government units, private sector groups, and non-profit organizations into national preparedness and response strategies to leverage the capability of these actors. They also discussed methods of strengthening linkages between various stakeholders and clearly delineating roles and responsibilities through standard policies and procedures.

24. Working Group Two concluded that local governmental units in developing countries often lack capacity for preparedness and response. To address this gap, countries must consider ways to strengthen local capacity in parallel with efforts at the national level. Working group two also noted that public health and law enforcement agencies do not naturally share information and integrate their investigations into biological events. To remedy this, governments should find opportunities to strengthen interagency linkages through trainings, simulations, exercises, and similar activities. This group noted that since surge capacity is often inadequate, especially in developing countries, prevention and preparedness is vital to mitigating consequences of an outbreak, accidental release, or intentional misuse of biological agents. Surge capacity planning needs to consider quantity and quality of supplies, the size and training of staff, the appropriateness of response systems, and the space needed for isolation, quarantine, and treatment. Finally, the group recognized that senior-level leadership is needed for effective, interagency and multisectoral response to an event. Often, the capacity to respond is available, and it is not necessary to reinvent the wheel, but it is important that leaders can leverage existing resources effectively. Full presentation of Working Group Two's conclusions is listed as **ANNEX 18**.

25. Working Group Three addressed how to enhance regional and international coordination for preparedness and response. They discussed the structures, goals, and roles/responsibilities of existing regional organizations and shared views on how to enhance the capacities of existing organizations to address biological events. They

also discussed how best to share results and maintain momentum following international workshops/meetings.

26. Working Group Three's recommendations included: continue to raise awareness with senior officials; utilize or refocus existing regional networks to address biological issues where possible and consider creating new structures if there are gaps; coordinate across human and animal health communities; consider how to encourage discussion on health issues during meetings on related topics, such as disaster relief; make sure that there is adequate follow-through, continuity, and information sharing after international meetings and workshops; improve mechanisms to share intelligence; seek to standardize procedures in the region, where possible; and work with intergovernmental organizations and partners, including the EU CBRN-CoE. Participants encouraged the ARF to consider addressing specific topics, including funding, strategic risk communication, regional information sharing, and early warning. They also encouraged the ARF to consider holding exercises focused on a biological incident. Full presentation of Working Group Three's conclusions is listed as **ANNEX 19**.

Conclusions and Steps Forward

26. The three working groups presented their conclusions to the full plenary session and discussed the development of an ARF best-practices document on Preparedness and Response to a Biological Event. The chairs announced that this document would continue to be developed with an aim of having the document proposed for consideration at the next meeting of the ARF Inter-Sessional Meeting on Counter-Terrorism and Transnational Crime. Participants shared views on possible next steps for work on biological issues under the Work Plan for Counter-Terrorism and Transnational Crime.