Meeting Report

# Biregional Consultation on the Asia Pacific Strategy for Emerging Diseases and Beyond

Photo by Kevin R. Hamdorf

Kuala Lumpur, Malaysia
24–27 May 2010

World Health Organization
Western Pacific Region

RS/2010/GE/21(MAA) English Only

REPORT

# BI-REGIONAL CONSULTATION ON THE ASIA PACIFIC STRATEGY FOR EMERGING DISEASES AND BEYOND

24 – 27 May 2010
Kuala Lumpur, Malaysia

Convened by:

WORLD HEALTH ORGANIZATION



Printed and distributed by:
World Health Organization
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Manila, Philippines

21 June 2010

Note

The views expressed in this report are those of participants and consultants in the Biregional Consultation on the Asia Pacific Strategy for Emerging Infectious Diseases and Beyond and do not necessarily reflect the policies of the Organization.

This report has been prepared by the Western Pacific Regional Office for the participants of the Biregional Consultation on the Asia Pacific Strategy for Emerging Infectious Diseases and Beyond, held in Kuala Lumpur, Malaysia, from 24 to 27 May 2010.

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# SUMMARY

The Biregional Consultation on the Asia Pacific Strategy for Emerging Infectious Diseases and Beyond, was held in Kuala Lumpur, Malaysia from 24 to 27 May 2010. This consultation meeting reviewed progress in implementing the Asia Pacific Strategy for Emerging Diseases (APSED) and a series of draft discussion papers prepared for the formulation of the proposed new strategy with the working title, APSED and Beyond.

The meeting concluded that overall significant progress has been made with the five APSED programme areas (surveillance and response, laboratory, zoonoses, infection control and risk communication). For example, all countries now have indicator-based surveillance, many have event-based surveillance and all have rapid response capabilities, at least at the national level. However, not all capacities had been strengthened to the same extent. For example, infection control still requires further leadership and resources. A particular feature of APSED implementation has been greater collaboration achieved across health systems and with other agencies such as animal health. While further investment in the five programme areas still is needed, the progress made now provides a good platform to begin to address the wider scope of challenges faced by the two regions.

Implementation of APSED also has helped countries with pandemic preparedness and response and supported resource mobilization for capacity building. In particular, the meeting acknowledged that APSED has provided a coherent framework to assist countries with their own financial management of and planning for the five programme areas. The new strategy should continue and enhance this legacy. The associated monitoring and evaluation systems also should support sustainable financial resourcing and active engagement with donors and other partners.

There was consensus that emerging diseases should continue to be the primary focus of the new APSED. The gains made with the five programme areas should be consolidated and also further strengthened. But within this context, the new strategy also should start to address the broader range of challenges and health threats faced by the global community. This would include recognition of the requests made by countries to incorporate additional programme areas into APSED and Beyond. The new strategy also should take into account recommendations from the Technical Advisory Group (TAG) and the need for further progress with the core capacities and other functional requirements specified in the International Health Regulations (IHR) (2005). In combination, this would mean the new strategy would retain the five current APSED areas and augment them with three new focus areas, as follows:

(1) surveillance, risk assessment and outbreak response, including event-based surveillance, rapid response and Field Epidemiology Training Programmes (FETP);

(2) laboratory;

(3) zoonoses;

(4) infection control;

(5) risk communication, including health emergency communication, operational communication and behaviour change communication;

(6) public health emergency preparedness and response, including, response logistics, case management, health care preparedness, points of entry and the National IHR Focal Point function;

(7) regional preparedness, alert and response, including information-sharing for public health response; and

(8) monitoring and evaluation, including improved alignment with the global framework for monitoring IHR implementation.

In addition to this expanded range and depth of focus areas, APSED and Beyond also should take into account other issues with either direct or indirect implications for public health or the implementation of the revised strategy. These special considerations will be outlined in a separate section and will assist countries to consider, plan for and take action as appropriate in relation to humanitarian emergencies, food safety, mass gatherings, deliberate release events, the social determinants of health and climate change. Also included as a special consideration will be recognition of the particular implementation challenges faced by small, isolated and lower income Pacific island countries and areas.

The intention is, subject to agreement by Member States, that the new strengthened APSED and Beyond framework will be in place beginning in January 2011 to assist countries across the two regions to meet both current and emerging challenges to collective public health security.

# 1. INTRODUCTION

The Biregional Consultation on the Asia Pacific Strategy for Emerging Infectious Diseases and Beyond was held in Kuala Lumpur, Malaysia, from 24 to 27 May 2010. This consultation meeting reviewed progress with the five programme areas of the APSED framework, reviewed the discussion papers prepared by the Secretariat and sought to formulate an outline of the structure and scope of a successor strategy with a working title of APSED and Beyond.

## 1.1 Objectives

The objectives of the consultation were:

(1) to review experiences and lessons learnt from the implementation of the APSED;

(2) to discuss the outcomes of country consultations on APSED and Beyond;

(3) to propose options for future strategic directions, approaches and main components of a future strategy to be considered for endorsement by the fifth TAG meeting.

## 1.2 Opening Remarks

Dr Corinne Capuano, WHO Representative, Malaysia, noted that since 2007 the world has recognized that we face increased risk from a wide range of threats, including disease outbreaks, industrial accidents, food security and other risks. The IHR 2005 were formulated and adopted by WHO Member States to assist countries by providing a collective international legal framework to meet a wide range of threats. WHO worked with countries in both the South-East Asia and Western Pacific Regions to formulate the APSED. This strategy provides a shared biregional framework for capacity building to support IHR 2005 implementation and, in particular, the management of emerging diseases. Across the two regions, population growth, rapid urbanization and environmental degradation continue to pose new challenges. These are compounded by ever-increasing volumes of international travellers and trade. The vulnerability to public health threats is universal. For these reasons, an updated APSED strategy will be a vital tool in our collective responses to these challenges. The world has changed dramatically since 1951, when WHO issued the first legally-binding treaty for the international control of specified infectious diseases. We now need to draw on the experience of recent years and the assembled expertise to build on the APSED framework to equip the two regions to meet the challenges of both the present and the future.

Dr Chong Chee Keong, on behalf of Dato' Dr Hasan bin Abdul Rahman, Deputy Director General, Ministry of Health, Malaysia, advised that Dr Rahman could not attend because he was just returning from the World Health Assembly in Geneva. He expressed the Ministry of Health's appreciation for Malaysia being selected by WHO to host this important consultation. meeting.

In recent years, many lessons have been learnt in public health in addition to the management of emerging infectious diseases. These include food safety, chemical spills,

emergency response and changing patterns of vector borne disease. Increasing globalization and rapid mass transport effectively have made the world a smaller place. In this context, a wide range of threats needs to be anticipated and planned for. The IHR 2005 establishes a strong basis to promote local, regional and global health security. The clear framework of surveillance, risk assessment, response and reporting capacities provide an explicit platform for the implementation of core public health functions. In particular, linking the roles of a range of government agencies is central to supporting the protection of public health. The same interagency partnerships that support IHR 2005 implementation at the national level will be equally as important at the intergovernmental and regional levels for the preparation and implementation of APSED and Beyond.

### 1.3 Organization of the meeting

The meeting comprised a series of presentations that updated participants on progress with and lessons learnt from the implementation of the APSED (See Annex 1 for the programme of activities and Annex 2 for a list of participants). Material was provided about the outcomes of preliminary consultations on the next steps for the APSED framework, including 22 discussion papers addressing issues proposed for inclusion in the revised strategy. Extensive group breakout sessions were conducted to discuss the status of current APSED activities, the proposed new content areas for, and the high level structure of, APSED and Beyond. Detailed feedback from the group discussions was reviewed and discussed in plenary sessions.

### 1.4 Participants

Chairs and co-chairs were appointed for each of the four days of the meeting as follows:

Day 1: Professor John Mackenzie, Technical Advisory Group, Australia.

Dr Kumnuan Ungchusak, Director, Bureau of Epidemiology, Thailand.

Day 2: Professor N. K. Ganguly, Director-General, Transnational Health Sciences & Technology Institute, India.

Dr Enrique Tayag, Director, National Epidemiology Centre, Department of Health, Philippines.

Day 3: Dr Abdul Yoosuf, Consultant in Internal Medicine, Maldives.

Dr Bounlay Phommasack, Deputy Director-General, Department of Hygiene & Prevention, the Lao People's Democratic Republic.

Day 4: Dr Mark Jacobs, Director of Public Health, Ministry of Health, New Zealand.

Dr Manas Banerjee, Consultant, Nepal.

Mr Andrew Forsyth, Office of the Director of Public Health, New Zealand, was appointed as Rapporteur for the consultation meeting.

## 2. PROCEEDINGS

### 2.1 Plenary 1: Overview of APSED and IHR implementation

*The chair, Professor John Mackenzie, TAG member, introduced the first session.*

2.1.2 Global update on IHR 2005 implementation, Dr Max Hardiman, WHO, Geneva.

Dr Hardiman expressed his appreciation to the Western Pacific Regional Office and the South-East Asia Regional Office for inviting Headquarters staff to participate in the further formulation of APSED. He reminded participants that the IHR 2005 were established by Member States, which had agreed to be bound by this common framework for public health security. The IHR 2005 take a multilayered approach to the identification and management of public health threats -- for example, moving away from a focus on border measures to containment at the source.

The National IHR Focal Points (NFPs) have proved to be a vital component of the new arrangements, both in taking a leadership role for IHR implementation within their country and also as participants in a global network for reporting and information-sharing in relation to emerging public health risks. This has been matched by the equally critical role of WHO regional IHR contact points, which have contributed to event management and supporting capacity building at both the country and regional levels.

NFPs have matured and become important players in a range of roles, including some that go beyond their legally defined functions under the IHR 2005. In practical terms, NFPs have provided leadership in risk assessment, advocacy for IHR implementation and capacity building and, especially, information-sharing with other countries' NFPs. Recent studies have shown that Annex 2 is well understood, but trends in reporting show that formal notifications by NFPs are not yet a major source of information to support WHO's global surveillance function.

WHO also has a range of implementation responsibilities under the IHR 2005, including global alert and response and programmes dedicated to specific risks such as chemicals, food safety and radiation. A largely web-based training programme has been created to support NFP staff understand their roles. The current influenza pandemic, as the first event determined to be a Public Health Emergency of International Concern, also has tested a number of IHR capacities and the significant planning undertaken for pandemic preparedness.

2.1.3 Update on IHR National Core Capacity Monitoring, Dr Stella Chungong, WHO, Geneva

The year 2010 marked the first time the extensive IHR monitoring framework has been used. This assists the Director-General of WHO to report to Member States on IHR implementation at the World Health Assembly (WHA) and allows WHO to identify priorities and work with other partners to support countries with continuing capacity building.

The eight core IHR capacities include surveillance, response, laboratory, risk communication, coordination, preparedness and legislation. These capacities cover biological, chemical and radiological hazards and must be in place locally (at the intermediate level where appropriate), nationally and at points of entry. Drawing on existing regional strategies, such as APSED, a set of indicators were established to make standardized assessments of these core capacities. These indicators were field tested in 11 diverse countries across all six WHO regions. Annual information will be collected from NFPs until 2012 and is intended to assist Member States with implementation work plans and for reporting to WHA. WHO also requested states parties to complete the detailed questionnaire, as issued in February 2010. This was revised based on experience with the 2009 questionnaire. The third element is the web-based monitoring tool which allows each country to input data within the framework of the core capacities and the questionnaire. However, detailed information is only able to be viewed by the country concerned.

### 2.1.4 Experiences and lessons learned from APSED and IHR 2005, Dr Li Ailan, WHO, Western Pacific Regional Office

The APSED was created to assist countries manage emerging diseases and to assess and strengthen core capacities as required under the IHR 2005. Dr Li reminded participants that emerging diseases under APSED are not limited to new infectious diseases but include a wide range of established and re-emerging diseases. The APSED focused on five programme areas: surveillance and response, laboratory capacity, zoonoses collaboration, infection control and risk communication.

Benefits of the APSED framework included a planning approach that engaged many levels of health care systems and intersectoral collaboration, especially with the animal health sector. It also provided momentum for infection prevention and control, which is an important but often neglected element of health care services. Countries conducted baseline APSED assessments, which provided valuable information for later planning and priority setting.

Progress with APSED was monitored by annual TAG reviews and detailed follow-ups with selected countries. Based on comparisons with the original baseline assessments, overall, significant progress has been made, especially in the area of surveillance and response. For example, all countries now have indicator-based surveillance, many have event-based surveillance and all have trained rapid response teams, at least at the national level.

Infection control also has experienced gains in a number of countries, but it was acknowledged that more work is needed in this area. The work on APSED programme areas also has helped countries with pandemic preparedness and response, supported planning for capacity building and helped with resource mobilization and donor support. This will provide a solid springboard for APSED and Beyond. For example, improvements in surveillance and risk communication will provide a good basis for broadening the scope to the all-hazards approach of the IHR 2005. Key lessons included the need to better communicate the relationship between APSED and IHR implementation, encouraging countries to identify a strong coordination mechanism and requiring more time for the baseline assessments than anticipated, leaving relatively less time for capacity building.

The Chair invited comments and questions:

- Regarding information received by WHO contact points and the Global Outbreak and Response Network (GOARN), do these correspond? While NFPs do provide significant information, they are not yet the reliable first source of information that they should be. Other sources, such as the media, often provide early warning and WHO is then able to approach the NFP for verification. This occurs because the media can (and for commercial reasons often must) cover an issue very quickly, usually within hours. National surveillance and assessment systems, however, are accustomed to testing their data and will seek to confirm important information before reporting to WHO. The new WHO event management system now allows informal communications to be included. The threshold for verification by WHO also has been lowered, requiring more events to be investigated.

- Is there consistency between Member States reporting on their compliance with the IHR 2005 and WHO assessments of their compliance? WHO assessments generally are based on Member States reporting, so they generally are congruent. Country offices also contribute to assessments.

- NFPs play a strategic role, but do they play an active and leadership role in the scanning and assessment of national surveillance? WHO also undertakes an active surveillance role. However, the systems and structures by which the national surveillance function is performed are for each country to determine as they see fit.

- The monitoring framework is a valuable mapping exercise. But what will happen if some countries are still at the foundation or minimal level for specified capacities in 2012? Countries will not be compared directly to each other, but the intention is to assist countries with their own planning and implementation arrangements. Additionally, regional and country offices are well placed to assist countries with capacity building.

## 2.2 Plenary 2 - Moving to APSED and Beyond. The results of country consultations

### 2.2.1 A presentation from Dr Chusack Prasittisuk, WHO, South-East Asia Regional Office

Detection and response to emerging diseases was a key driver for the APSED framework and for assisting countries plan for the implementation of the legally binding requirements under the IHR 2005. A regional information and event management system was established, policy and technical guidelines also were prepared and continuing collaboration across the two WHO regions actively was maintained.

Detailed in-country assessments were completed with two Member States. Surveillance and response, including the FETP capacity and rapid response teams, have improved considerably. Laboratory networks throughout the South-East Asia Region have been strengthened, as well as collaboration between the human and animal health sectors. Seven countries have isolation facilities in tertiary hospitals and five have monitoring for antimicrobial resistance.

All countries attended risk communication workshops. Countries concluded that all five APSED areas were useful for planning and capacity building purposes.

The South-East Asia Regional Office also sought the views of Member States on the priorities for the new strategy. This process identified a number of valuable suggestions, including a focus on environmental health and a wider range of health hazards, for which early detection and rapid containment would be important. APSED and Beyond should build on and not dilute work on the gains already made with emerging diseases, clinical management, cross-border collaboration, strengthened legislation, integrated logistics management and generic emergency preparedness. Some cross-cutting issues also were identified, including disaster response, climate change and mass gatherings.

The sustainability of APSED and Beyond will depend on long-term financial, technical and institutional resourcing and commitment. This can be achieved by a comprehensive approach to health systems development.

2.2.2 A presentation from Dr Reiko Tsuyuoka, WHO, the Lao People's Democratic Republic Country Office

Consultations with countries in the Western Pacific Region gave a firm indication that the APSED framework should be retained, revised and strengthened. The five current APSED programme areas strongly were supported as both useful and of continuing relevance. APSED and Beyond should build on the progress made to date. Surveillance systems should be expanded to include a wider range of health threats. Laboratory services should be aligned with the IHR 2005, including improved networking within and between countries.

Infection control remains a priority area for many countries in the Region, including the need for strong linkages between public health expertise and clinical management. Risk communication capability benefits from a clear communications structure. While emerging diseases remain pressing priorities for all countries in the Region and should continue to be a strong focus, the scope of APSED and Beyond should be expanded to address generic public health emergency preparedness, food safety (eg, strengthening linkages with the International Food Safety Authorities Network (INFOSAN) and clinical management, including hospital surge capacity and the improved management of severe cases.

Preparedness for natural disasters also was noted as an enduring concern for the Region, along with human resource development, such as FETP, especially for smaller and lower income countries. Pandemic experience and the IHR 2005 both suggest that points of entry also should be an area for further focus. A number of mass gatherings also have heightened awareness of the public health dimension of planning for such events. Bioterrorism, climate change and the social determinants of health also could be incorporated usefully into the new strategy.

2.3 Plenary - Current Core Capacity Areas

2.3.1 **A**n introduction to focus area discussion papers, Dr Takeshi Kasai, WHO, Western Pacific Regional Office

The 22 draft focus papers provide essential technical information on each of the building blocks proposed for inclusion in the revised strategy. When agreed and finalized, these papers will provide reference material to assist countries with their planning for and implementation of APSED and Beyond. For the purposes of the group discussions, the papers, which address a mix of issues that are either already part of the APSED framework or are proposed as new issues, were grouped provisionally into four categories:

(1) The existing five APSED programme areas. This includes programme areas for which there is little or no strategic framework other than APSED and also two areas which already have their own regional strategies (ie, laboratories and zoonoses).

(2) Recommendations received for possible new areas for inclusion in APSED and Beyond. This includes matters such as response logistics, clinical management and health care response, points of entry and others.

(3) Completely new areas: food safety, humanitarian emergencies and public health emergency preparedness, all of which have pre-existing frameworks, and, secondly, other matters such as mass gatherings, deliberate release, the social determinants of health and climate change.

(4) Special considerations such as cross-cutting issues that potentially could be considered throughout the new strategy. This includes the challenges faced by Pacific island countries and territories and the role of the NFP.

The Chair invited comments on both the content and possible grouping of the proposed focus areas.

Ms Amy Cawthorne, WHO, Geneva, on surveillance, risk assessment and response:

- Effective early warning for threat detection is built around indicator-based surveillance and event-based surveillance. These capabilities should be linked with risk assessment to inform rapid response measures. Event-based surveillance (EBS) systematically gathers information from a range of formal and informal information sources. While all-sources surveillance is not new, adopting a structured approach to EBS is relatively recent. Many countries have operated forms of EBS, but this may not have been recognized officially as such.

- Risk assessment involves the collation and evaluation of available information, the characterization of threats (including exposures and vulnerabilities) and informs consistent and defensible decisions. The risk assessment function should be very closely linked to the initiation and the continuing direction of response measures. These capacities need to be in place nationally, but also at the subnational level. Frequently, the surveillance, assessment and response capacities will be enhanced by engagement with the expertise and resources of sectors other than health. This requires prior planning and pre-agreed frameworks for coordination of information-sharing and response measures.

Dr Gyanendra Gongal, WHO, South-East Asia Regional Office, on laboratory services:

- Reliable, efficient and safe laboratory services are integral to the functioning of any effective health system. Results must be accurate, timely and reproducible to support both clinical care and public health action. Laboratories support surveillance and investigation, diagnosis and patient management. Historically, much emphasis has been placed on vertical, disease specific programmes. While this has supported targeted approaches to high-risk diseases, this approach has left many aspects of laboratory activity fragmented. Often, many laboratories have operated without the benefit of national policies or strategic plans.

- APSED has helped to address both of these issues. Any further focus on laboratory services should build on the achievements to date, including the efforts made to increase networking between laboratories (both across the health sector and between animal health and human health) and external quality assurance programmes. Further improvement of the

laboratory workforce and the preparation of national policies and regulation, including for biosafety and quality control, should continue to be priorities for the future.

Dr Gyanendra Gongal, WHO, South-East Asia Regional Office, on zoonoses collaboration.

- The Asia Pacific region has been the global epicentre for many emerging infectious diseases (EIDs). Most notably, SARS and avian influenza H5N1 have provided important reminders for coordination on zoonotic diseases. Human activities and environmental changes are the main drivers for the emergence of zoonoses of public health significance. Collaboration is needed within the WHO system and also with other intergovernmental organizations such as the World Organization for Animal Health (OIE) and the Food and Agriculture Organization (FAO). This is reflected in parallel challenges within countries, where several government agencies, sometimes with different priorities, need to cooperate for the effective detection and management of zoonoses.

- Recognizing this, WHO, OIE and FAO created a guideline to assist countries establish coordination mechanisms at the national and subnational levels. Effective control measures require timely intervention at the source. This includes best use of available resources and avoiding duplication of functions. This in turn requires each sector to have a clear understanding of the role and mandate of other sectors; this enables information-sharing and response measures to operate more effectively.

- The APSED zoonoses programme area, including active collaboration and use of multidisciplinary teams, also contributes to the One Health approach. Key issues for the future include further strengthening zoonoses coordination mechanisms at the national and subnational levels. The mandate and systems for such collaboration must be agreed in advance and clear at local and provincial levels, as well as nationally. Evidence-based risk reduction strategies that are appropriate to country circumstances should be formulated and implemented. Consideration should be given to establishing combined human and animal health laboratory capability and closer linkages to risk assessment and response functions.

Dr Satoko Otsu, WHO, Western Pacific Regional Office, on health care preparedness and response:

- Infection control, clinical management and health care preparedness and response must all combine in health care settings. APSED has played an important role in highlighting the critical role of infection prevention and control in protecting health care workers, patients and maintaining public confidence in the integrity of health care services. The creation of national infection control structures, the creation of national policies and guidelines and the promotion of training and logistics have all benefited from APSED.

- While good progress has been made, it remains clear that infection prevention and control is still far from routine in many health care settings. Clinical management is also central to outbreak control, whether this is at the local or the national level. Astute clinicians also play a vital role in the early detection of disease outbreaks as well as being essential to the diagnosis and treatment of cases. Preparedness in health care settings contributes to the above functions and also in helping to break transmission and the scaling of services to meet increased demand.

- Further work is needed to embed infection prevention and control good practise as routine in health care settings and not just in the context of outbreak response.

- Another potential area for APSED and Beyond may be to define the scope and acknowledge and support the role of clinicians in the detection and response to infectious disease outbreaks. These measures, in combination with workforce training and all-hazards emergency planning (including surge capacity), will assist with health care preparedness. The question for this consultation meeting is, should these three strands be combined or should they be treated separately?

Ms Yeo Wen Qing, WHO, Western Pacific Regional Office, on risk communication:

- Risk communication is a vital component of any public health response -- it should be ongoing and continuously adjusted in light of new information about both the threat and the response itself. Poor risk communication can increase the pressure on front-line staff, undermine public confidence and compromise the effectiveness of response measures. It is important to learn the risk communication lessons from both good and bad responses.

- Cultural and situational circumstances can have significant implications for the nature and relevance of key messages, especially when new information requires them to change over time. This calls for judgement on the part of risk communicators. Risk communication should be built into any response from the beginning and the requirements of the role will evolve during the course of the event.

- APSED has generated greater recognition of the value of risk communication in public health responses, and skill levels across the Region have improved as a result. However, capacity is needed at the local level, as well as in national responses, and different countries have started with different capacities. An important strategy can be to pool resources from various government agencies. This makes the most of available resources and can improve cooperation in response situations involving multiple agencies.

The Chair invited further comments and questions:

- Special consideration should be given to the financial architecture needed to support APSED and Beyond.

- There are numerous intersectoral considerations which influence health outcomes. The health sector can act as an information broker and advocate as a catalyst for action; the social determinants issue is a clear example of this principle.

- Climate change is a major and multifaceted programme of work in its own right. The challenge is how best the APSED and Beyond strategy can take advantage of this fact without duplicating or dissipating effort.

- In risk communication, building and maintaining trust and promoting transparency are two critical and interdependent elements.

- Several countries have made major use of One Health, but others are yet to be convinced or to decide how best to apply this way of thinking. Rather than referring to APSED as contributing to One Health, it may be more accurate to say that APSED employs some of the approaches associated with One Health.

- Health care preparedness should combine infection prevention and control, clinical management and health care preparedness in a single package. Infection prevention and control

should not just focus exclusively on infectious diseases but should be applied with all hospital-acquired infections in mind. This will resonate with all clinical staff and management, will help embed good practise as routine and in the long-term will yield considerable benefits, both in health outcomes and financially.

- Laboratory networks should encourage coordination and collaboration with food safety, water quality, environmental and toxicology laboratories.

- Internet-based training holds promise for a wide range of awareness-raising and basic capacity building.

2.4 Plenary 4: Feedback from Group Discussion 1

The Chair, Professor N. K. Ganguly, Director-General, Transnational Health Science & Technology, India, introduced the session by reminding the participants of the challenges faced in reviewing the content of the possible focus areas while also considering how best to group them to maximize synergies among the various components.

Selected key themes from the group discussions:

2.4.1 Group A - Surveillance, risk assessment and response

- The need for a continued and strong emphasis on close coordination between multifaceted surveillance systems, continuing assessment of the information gathered and using these to inform decision-making and response measures.

- The three strands need to operate locally and at the national level and reflect a broader, all-hazards, multiagency scope.

- APSED and Beyond should build on the platform provided by the gains achieved over the last five years.

2.4.2 Group B – Zoonoses

- Collaboration with animal health, driven initially by concerns over avian influenza H5N1, provides a good basis for engagement with other sectors, (eg wildlife, environment, food, laboratories).

- The holistic approach of One Health is likely to be helpful for framing future planning, research and risk assessment functions across human health, animal health and other sectors.

2.4.3 Group C - Health care preparedness and response

- This is a challenging group of issues and will continue to require continuing investment of resources, leadership and effort.

- A range of views were presented on how best to package the three strands of infection prevention and control (which should probably remain the main priority), case and clinical management and health care preparedness and response.

- While the underlying focus remains on emerging diseases, this package of programmes should also seek to address the endemic burden of nosocomal infection. Globally, at any one time, there are 1.4 million people with hospital-acquired infections.

2.4.4 Group D - Risk communication

- Risk communication capability is important to support both routine health sector activities and in outbreak or emergency responses.

- Effective risk communication can be achieved by pooling resources across agencies and including both professional and technical expertise and personnel with media skills.

- Risk communication is the public face of health care activity and should remain a focus area in APSED and Beyond.

The Chair invited comments and questions:

- While there has been progress across the five current APSED programme areas, and this will provide a good foundation for expanded activities as part of a broader scope for APSED and Beyond, overall progress has been variable. Some areas have advanced well (eg, surveillance), but others still face challenges (eg, infection prevention and control).

- Sustainable capacity building for APSED and Beyond also may need to be an additional special consideration (ie, a cross-cutting issue that supports all the relevant focus areas, including the core capacities required under the IHR 2005). It will be important to reach a common understanding of what capacity building means in practise. For example, recognition that in order to be sustainable, capacity building requires a long-term commitment to structures, staff, financial resources, technology, management, continuing training and a clear policy framework.

2.5 Plenary 5 - Introduction to new considerations

2.5.1 Response logistics for public health emergencies, Dr Roderico Ofrin, WHO, South-East Asia Regional Office

Logistics is more than just procurement and supply. It is a military science for procuring, maintaining and transporting material, personnel and facilities. In public health emergencies and humanitarian disasters, response logistics has to be delivered rapidly to address pressing health needs (ie, to prevent or reduce mortality or morbidity). Some activities occur before, during and after an emergency. It is important to accurately identify needs, and match resources in time and space to meet those needs. This is a dynamic and continuing process and requires continuous information exchange and attention to detail. Active coordination is therefore vital at every step of the logistics chain. A particular challenge is that many health agencies do not have the systems, structures and skilled staff for response logistics. Preparedness and response should always include other agencies, particularly those with generic emergency management responsibilities.

2.5.2 Organizational structure and National IHR Focal Point function, Dr Nicole Smith, WHO, Viet Nam

Countries should review and implement NFP functionality in light of their own experience with event communication and health sector structural arrangements. This also should take into account pre-existing whole of government coordination mechanisms. NFPs need pre-agreed authority for their information collation and dissemination role. Because of their central role in information-sharing, NFPs also either should be part of, or close to, national risk assessment and decision-making processes. It is important for the NFP to build and maintain interagency networks within the country to support the all-hazards scope of the IHR 2005. The NFP also may undertake a leadership and coordination role on behalf of the Member State for the wider planning and implementation of IHR 2005 requirements.

2.5.3 Public health interventions, Dr Rick Brown, WHO, South-East Asia Regional Office

A public health intervention is a disease control measure applied to a community or population. It is not about the treatment of individuals but seeks to stop the transmission cycle. This is a very broad definition and includes a range of both pharmaceutical and nonpharmaceutical measures.

Public health interventions are a standard operational feature of any outbreak response, but in the context of APSED and Beyond, some high-level consideration should be given to recognition that sometimes the wishes of individuals may have to be restricted for the wider public good. This involves balancing the benefits and effectiveness of an intervention against the disruption and costs. For significant interventions, political support and good risk communication may be critical to the acceptability and ultimately the effectiveness of the measures taken.

Often, decisions must be made and measures planned and implemented when information is incomplete or uncertain and the situation fluid. Guidance material should draw on both technical and policy expertise and support the use of appropriate interventions at the national and subnational levels. Guidelines may provide criteria to inform decision-making and practical advice to assist with the implementation of measures to be adopted.

2.5.4 Public health emergency preparedness, Dr Roderico Ofrin, WHO, South-East Asia Regional Office

Public health emergency preparedness applies to a wide range of natural and other emergencies, including epidemics, earthquakes, floods, chemical spills and mass gatherings. The South- East Asia Region has the greatest burden of deaths attributable to natural disasters. An all-hazards, risk management approach is required, as is engagement with all elements of the health sector and other agencies. A wide range of skills and capacities should be deployed in both planning and response: risk assessment, response logistics, consideration of legal and ethical issues, response coordination, clinical management, infection control and risk communication -- all contribute to the outcome. Significant interagency planning needs to occur in advance of any response, and this should take account of pre-existing generic, emergency preparedness structures and systems.

2.5.5 Regional Surveillance and Response, Dr Angela Merianos, WHO, Geneva

At the regional level, countries should be encouraged to provide data on priority diseases. The use of standardized case definitions for reporting will benefit both countries and regional risk assessment and coordination. Good information on standardized baseline rates can help with risk assessment and regional early warning of emergent events. The Global Outbreak Alert and Response Network (GOARN) provides a strong basis for coordinating outbreak surveillance and rapid response activities. Strengthening networks for laboratories and epidemiological training are current priority areas for GOARN and its partners. GOARN capabilities also could be expanded to include coverage of chemical and toxicology, animal health and response logistics.

2.5.6 Monitoring and evaluation, Dr Harpal Singh, WHO, Malaysia

Most counties have had first-hand experience in APSED monitoring and evaluation activities. As a result, a number of lessons have been learnt. For example, work plan monitoring, input and output evaluations, performance assessment -- each has different strengths and weaknesses. Some of the early baseline assessment tools were very resource-intensive to use, and the Asia and Pacific regions both created slightly different monitoring frameworks. Functional assessments have practical value, but comparisons can be difficult. The APSED model includes both a baseline assessment and a mid-term review.

The monitoring and evaluation framework envisaged for the revised strategy will take these lessons into account and be more streamlined. However, the regular reviews by the TAG of the previous year, combined with the making of recommendations for the forthcoming 12 months, proved very useful. Overall, the monitoring and evaluation for APSED and Beyond should be simple and common to both regions. Ideally, it also will be compatible with IHR requirements and other Headquarters monitoring and evaluation frameworks.

The Chair invited comments and questions:

- The language used in monitoring and evaluation can be very specialized and sometimes inconsistent between disciplines. What exactly is meant by performance assessment? For APSED monitoring, this took a health systems approach, geared towards existing capabilities, and evaluating outcomes and effectiveness.

- Both regions, and particularly the Western Pacific Region, have embraced GOARN during the term of APSED. This is a positive development, which hopefully will continue.

- Donors appreciate financial management and resource allocation being well-integrated into programme design and implementation. These approaches help with sound financial planning and accountability.

- Public health interventions: There is considerable value in reviewing the evidence base for interventions, but it should not be assumed that the findings are necessarily universal. Often the effectiveness, feasibility and acceptability of measures is context-dependent. For example, an intervention of limited use to a large, landlocked country might have greater relevance to a small, island country with few resources and little health infrastructure. Public health interventions require money and staff to implement them, so it is important to give careful consideration to the associated opportunity costs (ie, what other health activities will miss out as resources are deployed to support a particular intervention). Another issue is the links between different interventions. For example, adopting a particular measure may have synergies with, or indirectly

support, another intervention. These factors should all be taken into account when reviewing the evidence base for interventions.

- Social equity issues also need to be considered in terms of selecting balanced public health interventions (eg, cost issues associated with vaccines can reinforce existing health inequalities).

## 2.6 Plenary 6 - Special considerations and situations

### 2.6.1 Special consideration for Pacific island countries and areas, Dr Jacob Kool, WHO, Fiji

The 22 small island countries and areas of the Western Pacific Region are spread over a third of the world. Each has its own culture, history, language and institutions. Many have experienced terrible impacts from imported diseases, including, but not limited, to Spanish Flu in 1918-19, which devastated many populations.

In line with global trends, these communities are now affected by growing rates of noncommunicable diseases while continuing to experience high rates of infectious disease. The main challenges, in addition to their isolation, are a lack of human and financial resources. They have few skilled staff and limited training opportunities to address this. When staff are able to complete training, it is not uncommon for newly qualified graduates to be reassigned or leave for another country.

Laboratory facilities are very basic, often with only biochemistry and rapid tests. For this reason, many countries and areas are dependent on relationships with, and transport of specimens to, other laboratories in the Region. Outbreak detection is often delayed, as are response measures. As a result, the emphasis has to be on simple systems, reliant on the minimum of administrative infrastructure.

For example, strengthening early warning systems has focused on syndromic surveillance. Since 1996, the Secretariat for the Pacific Community and WHO have collaborated to support the voluntary Pacific Public Health Surveillance Network (PPHSN) to pool resources and expertise. A distance learning network also has been established to support training of local staff without taking them off-island.

Following a consultation process on APSED and Beyond, the countries and areas were clear that they wanted tailored support and tools that are more suitable to their needs. They have found the reporting requirements complex and sometimes inappropriate to their situations. Simple, scalable solutions will always be preferred -- fewer questionnaires, less off-island meetings and more communication and consultation conducted by Internet.

### 2.6.2 Points of entry, Dr Li Ailan, WHO, Western Pacific Regional Office

The IHR 2005 create some very specific obligations for points of entry (PoE) and international transport operators. Given the significant role of PoE in relation to economic activity, a joint meeting with the Association of South East Asian Nations (ASEAN) was held during the pandemic in November 2009. There also have been recent papers on the effectiveness of public health measures at PoE. Two main capacities are required of PoE -- routine preventive measures and those for emergency preparedness and response. Key issues are the need for increased awareness of the new paradigm of the IHR 2005 (as opposed to IHR 1969), in

particular the all-risks approach and the core capacity requirements. An example is the need to include public health emergency planning at PoE, in conjunction with other emergency planning.

During the pandemic, while there was debate about the efficacy of measures to minimize or delay the arrival of the virus, all countries used the border to raise awareness and provide public health advice to the travelling public. Countries are encouraged to share information about public health response measures at PoE, to help maximize consistency and reduce confusion for transport operators and the travelling public. PoE also should be integrated into national surveillance and risk assessment functions as well as with the NFP role.

2.6.3 Humanitarian emergencies, Dr Roderico Ofrin, WHO, South-East Asia Regional Office

Humanitarian emergencies remain a significant and continuing challenge for the Asia Pacific regions, which together accounted for 70% of the world's total natural disaster mortality over the last decade. WHO has four primary functions in humanitarian responses: assessment, coordination, gap filling and capacity building. WHO's role also covers risk reduction (eg, safe hospitals and contingency planning). Working to increase preparedness in vulnerable and poorly resourced communities will always be a challenge.

A key strategy for preparedness and response is to increase collaboration with partner agencies at the national and regional levels. On occasion, the grey literature will provide insightful commentary and analysis about humanitarian emergencies, even if not formally part of the peer-reviewed evidence base. Programmes can be stand alone, mixed mode (eg, as in the Philippines), or fully integrated. Which of these strategies to use will depend on the circumstances of the country and health system concerned.

2.6.4 Food Safety, Dr Gyanendra Gongal, WHO, South-East Asia Regional Office

Food borne disease and contamination always have been a traditional focus for public health protection. They remain a significant public health concern as international trade in food continues to increase. For example, a melamine contamination incident of pet food in 2007 was followed in late 2008 by a serious contamination event involving milk products for human consumption. Coordination among the multiple intergovernmental organizations is essential.

This is often reflected in a parallel need for improved interagency coordination at the national level as well. Reliable, transparent and efficient food quality monitoring is a prerequisite for participation in the international trade in food. The IHR 2005 and INFOSAN have complementary roles to play. Modernizing, harmonizing and strengthening national legislative frameworks and their enforcement is a continuing challenge. A further objective is the need to inform and empower consumers.

2.6.5 Mass gatherings, Dr Maurizio Barbeschi, WHO, Geneva

A mass gathering is any increase in the number of people in a given location which is sufficient to strain the planning and response systems and capacities available at that location. Without surge capacity, even business as usual health sector activities can be difficult to perform. This is in addition to the increased likelihood of the importation of novel infectious disease or outbreaks of endemic disease compounded by increased crowding.

Communication, information-sharing and planning must occur in advance to establish and maintain coordination mechanisms and contingency plans. Public and media tolerance of mismanagement in the event of an incident or emergency is usually low. The opportunities to strengthen public health capacities can be valuable, and preparedness for mass gatherings can leverage off the current APSED programme areas such as surveillance and response, laboratory and risk communication. One-off investment for mass gatherings (eg, interagency coordination or even mobile laboratory capability) can have a beneficial long-term legacy effect.

2.6.6 Deliberate release of biological, chemical and radiological agents,
Dr Roderico Ofrin, WHO, South-East Asia Regional Office

In recent years there have been increased numbers of these events. They usually take the form of terrorism (eg, anthrax or sarin releases), but sometimes gross incompetence may be involved. Again, the IHR 2005 apply to such events, including reporting as well as surveillance and response capacities. The release may be covert or overt, and if the former, then routine surveillance and risk analysis usually will provide the primary early warning. Links with other agencies, including police, intelligence and security, generally are required. These are agencies with which public health officials may not routinely interact. For this reason, exercises to test and clarify roles and responsibilities can be doubly useful. The time pressures on risk assessment, laboratory support and response are usually extreme, as may be media interest. Preparedness for such events also can be factored into planning for mass gatherings. Health care facilities may need to take special precautions and have contingency plans in place.

The Chair invited comments and questions:

- The challenges faced by the Pacific island countries and territories, in particular limited workforce and resources, should be borne in mind in the design of guidelines, tools, monitoring and reporting frameworks in APSED and Beyond.

- Another complication in the Pacific is the layer of organizations associated with the other, larger countries with an interest in the Region. For example, some Pacific island countries have close relationships with France, some with the United States of America, some with Australia and some with New Zealand. This suggests that potential benefits may arise from coordination among these countries in relation both to the Pacific island countries and also other regional networks such as PPHSN.

- Exit screening at the PoE raises many complex issues. This, as entry screening, will never identify asymptomatic travellers and so only will be partially effective at best. Additionally, many airlines will decline to accept obviously ill travellers for embarkation.

- During the peak activity of last year's response to pandemic influenza, screening measures at PoE were not implemented uniformly, and in some cases this created confusion among the public and led to political decisions. Health officials should rely on science, risk assessment and proportionality for decision-making but also recognize that other considerations inevitably will influence decisions.

- During SARS in 2003, screening of travellers was found to be ineffective. Has WHO any new evidence on the effectiveness or otherwise of travel restrictions from pandemic influenza? It was noted that Tokelau (a very small and isolated island group in the Pacific) instituted a strict week- long quarantine for arriving travellers and to date appears to be pandemic-free. In 1918-19, at least one Pacific island significantly delayed the arrival of

Spanish Flu. During 2009, Japan used entry screening for about 200 000 passengers; about 1000 were detected by rapid testing and, of these, 10 were H1N1 positive. It was noted that it is extremely important to be clear about what is meant by "effective" -- how is success defined? For example, exclusion may be feasible only in very limited circumstances, but even delaying arrival (eg, by a combination of border screening and post-border containment measures) can be useful to buy time for planning and to mobilize surge capacity. Additionally, border measures can raise awareness of risk, provide opportunities to disseminate public health messages and give the public a degree of reassurance. Also the practicality (and potential effectiveness) of border measures will be very dependent on each country's circumstances. Hence, absolute consistency of border measures may not be possible or even desirable.

- Food safety is a complex area, with contamination extending to include pesticides, micro-organisms, heavy metals, dietary supplements, hormones and antibiotics. It will therefore be important for any progress by way of APSED and Beyond to take into account the wide range of pre-existing treaties, strategies and intergovernmental organizations involved in food safety. The revised strategy may need to limit its focus primarily to just acute health events rather than the potentially very wide range of chronic health effects.

- Some mass gatherings in lower income countries take place in very difficult conditions and often with only the most minimal preparations for public health and safety.

- Where WHO is notified under the IHR 2005 of a risk to public health associated with the deliberate release of hazardous materials, then WHO is required to report such events to the Secretary-General of the United Nations, who may in turn refer it to the Security Council. At the national level, the health sector largely will still need to use its business as usual systems and capabilities, but these may need to be adapted to work in conjunction with a police- or security-led investigation and response.

### 2.7 Plenary 7 - Feedback from Group Discussion 2

Selected key themes from the group discussions:

#### 2.7.1 Group A - Monitoring and evaluation

- Monitoring and evaluation is essentially about learning and accountability.
- There are multiple stakeholders -- countries, the wider international community, WHO, donors and partners, all have discrete but overlapping interests.
- Information requirements should be pragmatic and rationalized, particularly in relation to the common capacity building focus of the IHR 2005 and APSED and Beyond.
- There should be a stronger role for the TAG in monitoring and evaluation (in addition to its advisory and priority setting functions).

#### 2.7.2 Group B: - Laboratory

- APSED capacities rely on the effective functioning of both public health and clinical laboratories. While further work is still required, the improved coordination achieved to date can now provide a launch pad for increased collaboration with animal health, environmental and other laboratories.

- Laboratories will continue to benefit from the formulation of clear national policies, the promotion of national standards for safety and quality assurance and coordination by a national laboratory focal point.

- Biosafety has been, and should continue to be, a priority for further focus on laboratory capacity.

2.7.3 Group C - Public health interventions and emergency preparedness

- There was support for widening the planning focus to accommodate generic, all-hazards approaches, as envisaged by the IHR 2005. However, this should build on, and not dilute, a continuing focus on emerging diseases.

- All-hazards public health emergency preparedness leads to coherence of systems rather than a multiplicity of issue-specific plans. It also generates synergies in expertise, coordination and resources.

- For public health interventions, further evidence should be generated and reviewed. Where a country is considering implementing such measures, APSED and Beyond could provide practical guidance that would assist officials to weigh the available evidence and help make balanced decisions in light of the costs and benefits.

2.7.4 Group D - Regional surveillance, risk assessment and response

- The advantages to countries of contributing to regional surveillance are not always obvious. During the early stages of pandemic influenza, the Regionwide situational awareness that was able to be achieved provides a good example of the benefits of accurate and timely regional surveillance and risk assessment.

- At the regional level, WHO can support the use of common case definitions and surveillance standards for indicator-based surveillance of priority diseases.

- Regional leadership can assist in the establishment of minimum datasets for the rapid assessment of new diseases.

- Use the model of clinical networks to promote the exchange of information and pooling of expertise between countries.

The Chair invited comments and questions:

- Early participation by Member States in the design and continuing implementation of the monitoring and evaluation framework improves its effectiveness and relevance -- for example, in the formulation of performance and outcome indicators.

- A financial tracking system associated with a monitoring framework can help ensure that donor funds continue to reach the necessary programmes for delivery.

- Care must be taken to ensure that assessment checklists do not become the plan. Regional performance indicators should support, rather than dictate, the implementation of each country's operational plan.

- Lower income countries were able to use APSED as a roadmap to assist with putting into operation the key requirements of the IHR 2005. However, smaller Pacific islands and territories will be looking for simplified monitoring and reporting requirements in APSED and Beyond.

- Monitoring and evaluation, including that conducted internally and for external reporting purposes, can help with making and reviewing investment decisions across the entire health system.

- Antimicrobial resistance can be considered an emerging disease, the significance of which continues to grow. How can this be reflected in the revised strategy? There is already a global antimicrobial resistance network which coordinates activity in this area. This is also an issue where reference laboratories should take a leadership role.

- For many lower income countries, specimen-taking, storage and transport remains a continuing challenge.

- Public health interventions ideally should include an evaluation component to further contribute to the evidence base to help inform future decision-making.

## 2.8 Plenary 8 - Cross-cutting issues

### 2.8.1 Field Epidemiology Training Programme, Dr Rick Brown, WHO, South-East Asia Regional Office

Epidemiological skills are essential for surveillance, risk assessment and response functions. The Field Epidemiology Training Programme (FETP) is of proven value in increasing front-line capacity for these core functions. In so doing, FETP makes a direct contribution to the IHR 2005 and the protection of public health.

Ten countries have established the full, two-year FETP course. However, building a skilled workforce takes time. It takes years to establish and maintain these courses and longer still to increase epidemiological critical mass at the country and regional levels. Securing sustainable financial resources and teaching staff is critical to the continuing viability of the programmes. In light of their circumstances, some countries have adapted the training to a short course format. The interdependence of countries suggests that all benefit from any increased capacity in the Region. A challenge for the future will be the inclusion of noninfectious public health events and the wider social determinants of health in the curricula.

### 2.8.2 Social determinants of health, Dr Rick Brown, WHO, SEARO

Improved human health is not only an outcome of socioeconomic development but also a means to achieving it. Considering the wider social, cultural and economic environment provides a frame of reference to help understand and address health inequalities. Inequalities in quality and quantity of life continue to grow both within and among countries. Social determinants, in particular poverty, can be thought of as the causes behind the causes of ill health. Socioeconomic factors are known to influence access to health services and the nature of demand for such services. Issues of gender and education are also important to both the situational analysis and to the solutions.

Recognizing that many of these factors lie outside the direct control of the health sector, programmes and activities, including those aimed at outbreak situations, need to take an

ecological, multisectoral approach. This can include preventive measures addressing issues such as community- level sanitation, housing and food security. The focus should be on modifiable risk factors while acknowledging that reactive firefighting always will be a part of public health activity.

The APSED and Beyond framework could help to generate data to describe and measure population parameters (eg, using age, gender, location and ethnicity data as a proxy for socioeconomic status) and using this to inform policies and programmes to improve the daily conditions of life. In seeking to address the daily living conditions associated with personal hygiene, food safety and proximity to animals (especially for rural communities), there are also potential links to the risk communication and zoonoses programme areas.

2.8.3 Climate change and health: impacts and adaptation, Dr Gyanendra Gongal, WHO, South-East Asia Regional Office

Climate change will be one of the defining challenges of the 21st century and as been recognized as a strategic priority for public health. The health effects of climate change increasingly will be spread unevenly around the globe. Health impacts often disproportionately affect already vulnerable populations (eg, adverse impacts associated with drought, flooding and food security). Factors such as severe weather events, erosion and sea level rises pose threats that particularly affect small island nations, high mountain zones and coastal areas. Weather and climate-sensitive infectious diseases such as cholera and vector borne diseases also will experience more favourable conditions.

Climate change is, of course, already a major focus of activity for the United Nations. Within this context, WHO has a work plan on climate change and health. At the country level, surveillance and response systems need to be flexible to adapt to changing disease patterns and environmental threats. The research agenda could be geared towards better understanding the nature and distribution of human health impacts and the effectiveness of mitigation strategies.

2.8.4 Sustainable financial mechanisms and partnerships, Dr Luo Dapeng, WHO, Mongolia

Economic conditions directly influence health outcomes, but the converse is equally true. Population health status – including measures taken to support it -- and economic activity are closely inter-related. For example, the public health response to SARS created significant economic consequences, and not just for the air transport sector and tourism. Public health action is often reactive in nature, whereas well-resourced and continuing preparedness can improve the effectiveness and efficiency of response measures. This in turn can reduce both health and economic impacts and save resources overall.

A shift in focus to a more flexible, long-term commitment to generic resource mobilization for strengthening health systems could help to strengthen core capacities and increase resilience. The use of public and private partnerships in preparedness planning is not well-developed but could be promoted to help access increased resourcing. For example, both the public and private sectors share a common interest in business continuity planning and maintaining a healthy and productive workforce.

2.8.5 Information-sharing for public health action, Dr Nima Asgari-Jirhandeh, WHO, Cambodia

The goal is to promote information-sharing to inform evidence-based public health action. Meaningful information exchange relies on systems, skilled staff and collaboration among a range of stakeholders. With FETP, laboratory and surveillance and response capacities expanding across the Region, there are new opportunities for information-sharing for mutual advantage. This in turn can support risk assessment, priority setting and decision-making. It may be appropriate to create a network hub to gather and disseminate information. Potential language barriers and structural issues, including resourcing and location, will need to be considered and addressed.

The Chair invited comments and questions:

- FETP personnel continue to benefit from access to, and advice from, mentors once they complete the programme and return to work. Providing FETP trainees with a career pathway to help retain them in-country and also a forum or network for them to meet and share their experiences can be valuable for their further improvement.

- Health is often correlated with other socioeconomic indicators such as education, housing and occupational status. Clarifying and promoting awareness of these correlations can help health officials to engage with other sectors.

- A gender analysis has been completed examining the differential impacts of infectious disease on women and men.

- Socioeconomic factors should be considered explicitly in risk assessment and risk communication. This can be supported by good epidemiological information at the population level.

- What can APSED be expected to do about climate change? APSED and Beyond could provide guidance for laboratory networks, research priorities and support surveillance and response capabilities to address changing patterns in vector borne disease and public health threats.

- -Following Copenhagen in 2009, there will be a meeting in Mexico. This may provide an opportunity to further address the human health impacts of climate change (eg, climate refugees).

- Any knowledge management structure will need to address economic barriers to sharing information. This could be assisted by differentiating between information-sharing in acute response situations (as governed by the IHR 2005) as opposed to more general information sharing (eg, countries often upload routine surveillance data onto websites), research and publication for policy and planning purposes.

2.9 Plenary 9 – Plenary feedback from Group Discussions 3 and 4

Selected key themes from the group discussions:

2.9.1 Group Discussion 3, Group A - Field Epidemiology Training Programme

- FETP supports all of the five programme areas of APSED and core capacities specified in the IHR 2005.
- FETP would benefit from progress towards regional standardization and long-term commitment to resourcing at the country and regional levels, for example by establishing an alumni network and promoting accreditation of courses as appropriate.
- APSED and Beyond will help to frame the scope of FETP course content.

2.9.2 Group B - Points of entry and National IHR Focal Points

- Given the IHR 2005 mandate, both PoE and NFPs should be included in APSED and Beyond.
- Entry screening is not the only public health measure able to be implemented at the border. APSED and Beyond can provide guidance on a range of other potential border measures (eg, provision of information to the public and even exit screening).
- Given the diversity of country circumstances associated with PoE, including ground crossings, and island countries, the absolute consistency of border measures is neither desirable nor possible.
- PoE require both routine and continuing activity (including the requirements for designation under the IHR 2005) and also scalable, emergency response capacity.
- For NFPs, countries should decide what organizational structure is most appropriate, taking into account the need for functional, multisectoral communications, epidemiological and other technical expertise and the mandate and authority of the NFP to communicate on behalf of the Member State.

2.9.3 Group C - Response logistics

- Public health operations and logistics support to the health sector for outbreak and humanitarian responses should be included in APSED and Beyond, though not necessarily as a primary focus area.
- Planning and training for staff must occur prior to activation, including knowledge of public health issues (eg, vaccine cold chain), health system administrative procedures and knowledge of the roles and capacities of other agencies.
- Countries should share information and experience with others to promote best practise.

2.9.4 Group D - Special considerations, Pacific island countries and territories and climate change

- Small, remote countries with relatively few human and infrastructure resources have established strong regional networks and bilateral relationships to address the challenges they face.

- With limited staff resources and personnel often covering multiple roles, current APSED indicators are not always appropriate to the circumstances of the Pacific island countries. Simplified APSED and IHR 2005 monitoring and reporting is desirable.

- Climate change should be addressed in APSED and Beyond as a special consideration and, in particular, surveillance and response systems should be strengthened and sensitized to the public health implications of climate change.

The Chair invited comments and questions:

- The implementation of exit controls raises complex legislative and practical issues. How realistic is this approach? The feasibility and enforceability of exit measures can vary widely from country to country. However, even providing information to departing travellers, cooperation by airlines (which have discretion not to embark obviously ill passengers) and seeking voluntary compliance by travellers can be constructive. It is, of course, extremely difficult for any border measures to be completely effective (this is recognized by the IHR 2005, in which PoE are just one tier in a multilayered approach to public health security). Consideration of exit measures also acknowledges the interdependence of countries and the responsibility, including under the IHR 2005, that countries have to each other to minimize the export of public health risks -- particularly in relation to novel diseases and where transport routes are limited. As all border interventions, any exit measures need to be planned in advance, including with airlines, shipping operators and PoEs.

- With FETP, it can be difficult to integrate this type of training with other university-level courses and qualifications, the arrangements and requirements for which can vary from country to country.

2.9.5 Group Discussion 4, Group A - Information-sharing for public health action

- The focus of APSED and Beyond should be on early warning and acute events.

- The regional focus should be on mechanisms to support sharing of information on events and epidemiological findings.

- Sharing information on risk communication, key messages and response measures also will be beneficial to countries.

- Information-sharing also will support FETP capacity building at both national and regional levels.

2.9.6 Group B - Social determinants and sustainable financial mechanisms

- Social determinants such as gender, educational status and poverty impact on health both directly and indirectly, but primary responsibility for these issues lies outside the scope of APSED. However, APSED can consider these issues in relation to vulnerability to emerging disease threats (eg, in advocacy, provision of evidence-based information and collaboration with other sectors). Further opportunities may be found in strengthening surveillance and response capacities and planning for and responding to humanitarian emergencies and the effects of climate change.

- APSED and Beyond should be included in countries' long-term funding plans. Where funding is constrained, APSED and Beyond will help with prioritization and the justification for programmes.

- ASPED and Beyond will assist countries to address the fragmentation of funding sources and resources.

2.9.7 Group C - Food safety and humanitarian emergencies

- Food safety is already a well-established area of activity, in particular the coordination of systems and structures under INFOSAN. However, food safety does link to a number of existing and proposed APSED areas, including laboratories, surveillance, assessment and response and risk communication.

- Food safety should not be a separate focus area and the revised strategy should not seek to duplicate the pre-existing regulatory roles and responsibilities. However, APSED and Beyond could usefully include communication, risk assessment and coordination roles and clarify opportunities for improved links with INFOSAN and related structures.

- Humanitarian emergencies rely on joint preparedness within the health sector and between the health sector and other government agencies and capabilities. For example, generic emergency management agencies already may be well-linked to international support arrangements. As with food safety, humanitarian emergencies should not be a separate focus area for APSED and Beyond but should be a special consideration linked to other programme areas such as public health emergency preparedness and response and response logistics.

2.9.8 Group D - Mass gatherings and deliberate release

- Mass gatherings either may be planned or unplanned – ranging from official events organized years in advance to those that are informal or spontaneous. In either case, health is not usually the lead agency. Again, this is a special consideration for communication, coordination and planning, but not a separate focus area.

- Mass gatherings can provide opportunities for political and funding support for capacity building.

- Surge capacity for core APSED functions (eg, surveillance, risk assessment and response and public health emergency preparedness) is important for the successful management of mass gathering events.

- Deliberate release events are rare and subject to significant uncertainty (posing challenges for surveillance, risk assessment and laboratory capabilities). Such events are usually characterized by time pressure, intense media scrutiny and leadership by other agencies.

The Chair invited comments and questions:

- The evidence base for activities to take account of social determinants may be difficult to put into operation in practical terms. The APSED and Beyond approach to social determinants

should not be prescriptive but rather prompt consideration as to whether, and provide suggestions as to how, particular circumstances should be taken into account where appropriate.

- Resources and funding can be found for programme areas and capacity building where there are clear links to wider economic activity and interests.

- Food safety, climate change and social determinants are all good examples of special considerations that are cross-cutting themes. APSED and Beyond may help clarify the interdependencies between these and assist in setting the research and policy agenda, but without directing or requiring countries to take any particular actions.

- A matrix of overlapping elements, suggesting opportunities for information-sharing and supporting the links between a range of programme areas, could be a useful approach to maximize synergies among the various components of APSED and Beyond.

2.10 Plenary 10 – Structure of APSED and Beyond

The Chair, Dr Mark Jacobs, Ministry of Health, New Zealand, introduced the discussion on the proposed structure for ASPED (2010).

Dr Okabe, TAG member, Japan, outlined a proposal, which endeavoured to synthesize the requests made by countries, the recommendations of TAG, the experience gained in implementing APSED, the content of the focus papers and the results from the group work discussions. The resulting structure proposed for APSED (2010) comprises five sections:

(1) Section 1 would reprise APSED in light of implementation experience. It also would outline the scope and clarify the audience.

(2) Section 2 would include a vision statement, goal and outline the five objectives.

(3) Section 3 would set out the nine focus areas for activity, including the five programme areas from the current APSED:

(a) surveillance, risk assessment and (outbreak) response;

(b) laboratory;

(c) zoonoses collaboration;

(d) infection control;

(e) risk communication;

(f) points of entry;

(g) public health emergency preparedness and response;

(h) regional preparedness, alert and response; and

(i) monitoring and evaluation.

(4) Section 4 would include special considerations, some similar, some different, including Pacific island countries and areas, humanitarian emergencies, food safety, mass gatherings, deliberate release, social determinants of health and climate change.

(5) Section 5 would implement the strategy

APSED originally was geared towards emerging disease threats such as pandemic preparedness and the continuing management of infectious disease and the implementation of the IHR 2005. The participants were invited to look ahead to 2015 and consider what will be needed as focus areas and relevant.

Some comments were made to the proposed pillars or the focus areas, where to place PoE, how to address zoonoses and financial support. It was suggested that a matrix approach be used to ensure the links between all the focus areas and special considerations.

Consensus and suggestions on the focus areas for the revised APSED are included in the conclusions and recommendations.

### 2.11 Plenary 11 - Conclusions and Next Steps

Dr Jacobs sought and gained confirmation from the participants that PoEs should be incorporated into the focus area on public health emergency preparedness and response.

Closing remarks:

Dr Chusak Prasittisuk, Coordinator, Communicable Diseases Control, South-East Asia Regional Office, thanked Dr Kasai and his team for successfully organizing the biregional consultation meeting. The meeting continued and built upon the fine record of cooperation between the two Regions. He thanked all the temporary advisers for their active and constructive engagement throughout the four days. He noted that, collectively, we have gained considerable experience from APSED and that this knowledge will be used to great advantage in the finalization and implementation of APSED (2010).

Dr Prasittisuk also thanked the Secretariat, including those from Headquarters, who helped ensure such a productive meeting. He commented on the significant effort that went into the preparation and review of the 22 discussion papers and that this was reflected in the high quality of the documents. He expressed his confidence that APSED (2010) will make a valuable contribution to the continuing management of emerging diseases and would assist all countries in the two Regions with further implementation of the IHR 2005.

Dr Kasai expressed his appreciation to all participants for their hard work before and during the meeting. He noted that the discussion papers will be revised as a result of the extensive comments generated in the discussion groups, edited, reviewed by the original authors and then finalized. They then will be used as reference papers to support the implementation of APSED (2010). Following formulation by the Secretariat and review by TAG, the new strategy then will be considered with a view to approval by Member States. The intention is to have the new APSED (2010) strategy operational from 1 January 2011.

The Chair concluded the meeting by thanking both the Secretariat and participants.

# 3. CONCLUSIONS

## 3.1. General

APSED has proved to be a useful, common framework for Member States, WHO and partners. The five programme areas (surveillance and response, laboratory, zoonoses, infection control and risk communication) laid out under APSED have made a significant contribution to managing the pandemic response and building up to the IHR (2005) core capacity requirements and also continue to be focused on other emerging disease threats.3.1.2 APSED also has been a helpful tool for Member States to identify priorities, facilitate multisectoral national planning, coordinate various project-based activities or improve resource mobilization.3.1.3 APSED has served as a rational framework, helping to align donor investments to strengthen national and regional capacities.3.1.4 Progress made in the five APSED programme areas, the lessons learned in implementation and the experience with pandemic response provide a good foundation for Member States to expand the scope of APSED activities. 3.1.5 During APSED implementation, requests from Member States and recommendations from the Asia Pacific Technical Advisory Group for Emerging Infectious Diseases (TAG) meeting were made to include new activity areas, including response logistics, clinical management and health care preparedness.3.1.6 The time frame of APSED is the period 2006–2010. As this period draws to an end, Member States were consulted and agreed in principle to a revised strategy with a working title of APSED and Beyond. 3.1.7 The Member State consultation process has been helpful to understand country needs and expectations for national capacity building, in particular the National IHR Focal Point function, PoE and public health emergency preparedness, as required under the IHR (2005). The country consultation process also helped identify the range of the APSED and Beyond discussion papers. 3.1.8 This consultation meeting reviewed 22 draft discussion papers and found they all were relevant to emerging diseases and IHR (2005) implementation. As a result, this consultation meeting concluded:

(1) The current five APSED programme areas (including FETP) provide a good foundation for emerging diseases but still require further improvement to fully address emerging diseases and other public health threats as well.

(2) Two areas (PoE, public health emergency preparedness and response), required under the IHR (2005) but which were not separately identified in the current APSED, should be incorporated in APSED (2010).

(3) Given the experience gained with APSED implementation, two further areas (regional preparedness, alert and response, including information-sharing for public health action and monitoring and evaluation) are implicit in APSED and warrant recognition.

(4) The new activity areas requested by Member States and recommended by TAG during APSED implementation (response logistics, case (clinical) management, health care preparedness) can be incorporated into the above areas.

(5) The remaining discussion topics (Pacific island countries and areas, humanitarian emergencies, food safety, mass gatherings, deliberate release, social determinants of health and climate change) can be included for special consideration as cross-cutting issues.

3.2 Recommendations

The scope of APSED (2010) should continue to include a primary focus on emerging diseases and, in light of the IHR (2005) requirements, capacity building for other public health risks also should be addressed.

The structure of APSED (2010) should reflect a manageable number of core areas of activity.

The focus areas of APSED (2010) activity should comprise:

(a) the five current APSED programme areas;

(b) one key area remaining to give effect to IHR requirements: public health emergency preparedness and response, including PoE;

(c) two areas (regional preparedness, alert and response and monitoring and evaluation) are implicit in APSED and warrant recognition;

(d) APSED (2010) should incorporate the new activity areas requested by Member States and recommended by TAG, including response logistics, case (clinical) management and health care preparedness; and

(e) The establishment of core capacities should provide the ability to respond to particular situations. Such special considerations should be included under a separate section in APSED (2010), as appropriate.

Monitoring and evaluation, in particular, should be strengthened and streamlined, building on the experience and lessons learned from the current APSED and the IHR (2005) implementation, including:

(a) using the IHR questionnaire (*IHR Monitoring Framework: Questionnaire for monitoring progress in the implementation of IHR core capacities in states parties*) as the basis for monitoring and evaluation, with additional APSED- specific questions asked only if necessary;

(b) strengthening the annual Member State review process by ensuring:

the IHR questionnaire is used to facilitate a strong, multisectoral process, supported by WHO;

TAG formally reviews summarized IHR information;

(c) enhancing TAG's monitoring and evaluation function by fostering formulation and review of national work plans;

(d) No mid-term review, only a final evaluation.

APSED (2010) should include a matrix to clarify the links among the different focus areas and the special considerations.

APSED (2010) should be used as a framework in helping to align and proactively mobilize donor investments to strengthen national and regional capacities.

Taking into account the findings of the APSED independent evaluation, the draft APSED (2010) should be reviewed and endorsed by TAG before final consideration by Member States.

**ANNEX 1**

PROGRAMME OF ACTIVITIES

***Day 1– 24 May (Monday)***

| | |
|---|---|
| 08:30 – 09:00 | Registration |
| 09:00 – 10:00 | Opening Session |
| | Opening remarks<br>– *Dr Corinne Capuano, WHO Representative, Malaysia* |
| | Welcoming remarks<br>– *Dr Chong Chee Keong on behalf of Dato' Dr Hasan bin Abdul Rahman, Deputy Director General of Health (Public Health), Ministry of Health, Malaysia* |
| | Self Introduction |
| | Meeting objectives, expected outcomes and agenda |
| | Administrative announcements |
| | Group photograph |
| 10:00 – 10:30 | *Coffee break* |
| 10:30 – 11:30 | Plenary 1: Overview of APSED / IHR Implementation |
| 10:30 – 11:30 | Update on IHR Implementation<br>– *Dr Max Hardiman* |
| | Update on IHR Core Capacity Monitoring<br>– *Dr Stella Chungong* |
| | Experiences and Lessons Learned from APSED / IHR<br>– *Dr Ailan Li* |
| | Questions and comments |
| 11:30 – 12:00 | Plenary 2: Moving Beyond APSED: results of country consultation process |
| 11:30 – 12:00 | Results of 'Beyond APSED' Country Consultations<br>– *Dr Chusack Prasittisuk*<br>– *Dr Reiko Tsuyuoka* |
| | Questions and comments |
| 12:00 – 13:00 | *Lunch* |

13:00 – 15:00 Plenary 3: Introduction to Discussion Papers

Introduction to Discussion Papers
- *Dr Takeshi Kasai*

Surveillance, Risk Assessment and Response
- *Ms Amy Cawthorne*

Laboratory
- *Dr Gyanendra N. Gongal*

Zoonoses Collaboration
- *Dr Gyanendra N. Gongal*

Health Care Preparedness and Response
- *Dr Satoko Otsu*

Risk Communications
- *Ms Wen Qing Yeo*

Questions and comments

15:00 – 15:20 *Coffee break*

15:20 – 17:30 Group Discussion 1

15:20 – 17:30 Discussion and review of Discussion Papers

- Group A: Surveillance, Risk Assessment and Response
- Group B: Zoonoses Collaboration
- Group C: Health Care Preparedness and Response
- Group D: Risk Communications

18:30 *Reception*

***Day 2 –25 May (Tuesday)***

08:30 – 08:40 Wrap up of Day 1
- *Mr Andrew Forsyth*

08:40 – 10:00 Plenary 4: Feedback from Group Discussion 1

- Group A: Surveillance, Risk Assessment and Response
- Group B: Zoonoses Collaboration
- Group C: Health Care Preparedness and Response
- Group D: Risk Communications

Questions and comments

| | |
|---|---|
| 10:00 – 10:20 | *Coffee break* |
| 10:20 – 12:00 | Plenary 5: Introduction to Discussion Papers |
| | Response Logistics<br>– *Dr Roderico H. Ofrin* |
| | Organizational Structure and IHR National Focal Point Function<br>– *Dr Nicole Smith* |
| | Points of Entry<br>– *Dr Li Ailan* |
| | Public Health Emergency Preparedness<br>– *Dr Roderico H. Ofrin* |
| | Regional Surveillance and Response<br>– *Dr Angela Merianos* |
| | Monitoring and Evaluation<br>– *Dr Takeshi Kasai* |
| | Questions and comments |
| 12:00 – 13:00 | *Lunch break* |
| 13:00 – 15:30 | Group Discussion 2 |
| 13:30 – 15:30 | Discussion and review of Discussion Papers<br>– Group A: Monitoring and Evaluation<br>– Group B: Laboratory<br>– Group C: Public Health Emergency Preparedness / Public Health Interventions<br>– Group D: Regional Surveillance and Response |
| 15:30 – 15:50 | *Coffee break* |
| 15:50 – 17:30 | Plenary 6: Introduction to Discussion Papers |
| | Special Consideration for Pacific Island Countries and Areas<br>– *Dr Jacob Kool* |
| | Public Health Interventions<br>– *Dr Rick Brown* |
| | Humanitarian Emergencies<br>– *Dr Roderico H. Ofrin* |

Food Safety
- *Dr Gyanendra N. Gongal*

Mass Gatherings
- *Dr Maurizio Barbeschi*

Deliberate Release of Biological, Chemical and Radiological / Nuclear Agents
- *Dr Roderico H. Ofrin*

Questions and comments

***Day 3 –26 May (Wednesday)***

08:30 – 08:40 Wrap-up of Day 2
- *Mr Andrew Forsyth*

08:40 – 10:00 Plenary 7: Feedback from Group Discussion 2
- Group A: Monitoring and Evaluation
- Group B: Laboratory
- Group C: Public Health Emergency Preparedness / Public Health Interventions
- Group D: Regional Surveillance and Response

10:00 – 10:20 *Coffee break*

10:20 – 12:00 Plenary 8: Introduction to Discussion Papers

Field Epidemiology Training Program
- *Dr Rick Brown*

Social Determinants of Health
- *Dr Rick Brown*

Climate Change and Health: Impacts and Adaptation
- *Dr Gyanendra N. Gongal*

Sustainable Financial Mechanisms and Partnerships
- *Dr Luo Dapeng*

Information Sharing for Public Health Action
- *Dr Nima Asgari-Jirhandehi*

Questions and comments

12:00 – 13:00 *Lunch break*

13:00 – 15:30 Group Discussion 3

13:00 – 15:30 Discussion and review of Discussion Papers

- Group A: Field Epidemiology Training Program
- Group B: Organizational Structure and IHR National Focal Point Function / Points of Entry
- Group C: Response Logistics
- Group D: Special Consideration for Pacific Island Countries and Areas / Climate Change and Health: Impacts and Adaptation

15:30 – 15:50 *Coffee break*

15:50 – 17:30 Group Discussion 4

15:50 – 17:30 Discussion and review of Discussion Papers

- Group A: Information Sharing for Public Health Action
- Group B: Social Determinants of Health / Sustainable Financial Mechanisms and Partnerships
- Group C: Food Safety / Humanitarian Emergencies
- Group D: Mass Gatherings / Deliberate Release of Biological, Chemical and Radiological / Nuclear Agents Deliberate Releases

***Day 4 –27 May (Thursday)***

08:30 – 08:40 Wrap-up of Day 3

- *Mr Andrew Forsyth*

08:40 – 10:40 Plenary 9: Plenary Feedback Discussion

Feedback from Group Discussion 3

- Group A: Field Epidemiology Training Program
- Group B: Organizational Structure and IHR National Focal Point Function / Points of Entry
- Group C: Response Logistics
- Group D: Special Considerations for Pacific Island Countries and Areas / Climate Change and Health: Impacts and Adaptation

Feedback from Group Discussion 4

- Group A: Information Sharing for Public Health Action
- Group B: Social Determinants of Health / Sustainable Financial Mechanisms and Partnerships
- Group C: Food Safety / Humanitarian Emergencies
- Group D: Mass Gatherings / Deliberate Releases

10:40 – 11:00 *Coffee break*

| | |
|---|---|
| 11:00 – 12:00 | Plenary 10: Structure of Beyond APSED |
| | Proposed structure of a revised APSED strategy |
| | General discussions and comments |
| 12:00 – 13:00 | *Lunch break* |
| 13:00 – 15:00 | Plenary 10: Structure of Beyond APSED (continued**)** |
| | Continue discussions on the structure of the Beyond APSED strategy |
| 15:00 – 15:20 | *Coffee break* |
| 15:20 – 17:30 | Plenary 11: Conclusions and Next Steps |
| | Conclusions and Next Steps<br>Closing Remarks |

**ANNEX 2**

PROVISIONAL LIST OF TEMPORARY ADVISERS,
OBSERVERS AND SECRETARIAT

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