REPORT

FIRST MEETING OF THE ASIA PACIFIC TECHNICAL ADVISORY GROUP
ON EMERGING INFECTIOUS DISEASES

WHO REGIONAL OFFICE FOR THE WESTERN PACIFIC, MANILA, PHILIPPINES
18 to 20 July 2006

Manila, Philippines
August 2006
REPORT

FIRST MEETING OF THE ASIA PACIFIC TECHNICAL ADVISORY GROUP ON EMERGING INFECTIOUS DISEASES

Convened by:

WORLD HEALTH ORGANIZATION

Manila, Philippines
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Not for sale

Printed and distributed by:

World Health Organization
Regional Office for the Western Pacific
Manila, Philippines

August 2006
The views expressed in this report are those of temporary advisers, participants, and consultants in the First Meeting of the Asia Pacific Technical Advisory Group on Emerging Infectious Diseases and do not necessarily reflect the policies of the World Health Organization.
SUMMARY

The Asia Pacific Strategy for Emerging Diseases (APSED) has biregional endorsement as the strategic document to guide countries of the Asia Pacific Region and regional partners in implementing the core capacity requirements of the International Health Regulations (2005) as they relate to communicable disease prevention and control. The purpose of the first meeting of the WHO Technical Advisory Group on Emerging Diseases was to review and revise the draft WHO Work Plan for the implementation of the Asia Pacific Strategy for Emerging Diseases, 2006–2010 (the “Work Plan”) developed to guide WHO in its support to countries of the Region in meeting their capacity development obligations under the International Health Regulations (2005). The WHO APSED Work Plan recognizes that countries of the Asia Pacific Region vary widely in the capacity and capabilities of their early warning and epidemic response systems and the need for a flexible, phased approach to APSED implementation. Regional activities are intended to provide the Asia Pacific Region with a “safety net” while strengthening national capacities. Improved collaboration between local public health and animal health partners, countries and international partners is essential for early alert and response to emerging infectious diseases.

In order to reduce vulnerability to emerging diseases, countries of the Region need to strengthen both public health systems for standard responses to disease threats and develop specific preparedness arrangements for specific threats such as avian influenza and pandemic influenza. All countries are encouraged to implement the emergency arrangements for avian and pandemic influenza as soon as possible.

The objectives of the meeting were to: discuss the current situation on emerging infectious diseases and assess capacity for rapid response; review and revise the draft WHO APSED Work Plan, including regional priorities and targets; and identify priorities in regional capacity strengthening and make recommendations on future steps. In order to facilitate information sharing and in-depth discussions, the meeting included a number of plenary presentations, poster presentations, and group work in the form of a Countries’ Forum, Partners’ Forum and internal Technical Advisory Group (TAG) meeting.

TAG comments and recommendations

The TAG highlighted the fact that APSED is a comprehensive strategy which cannot be fully implemented by all countries of the Asia Pacific Region within the stated five years of the Strategy. Accordingly, the TAG supported the decision by WHO to adopt a phased approach to implementation by identifying the key components of alert and response systems that can substantially reduce national and regional vulnerability from emerging infectious diseases within a five-year time frame. The six programme areas of the Work Plan are: surveillance and response, laboratory capacity, zoonoses, infection control, reducing vulnerability through effective communication and WHO regional functions and activities. Early warning and response systems, Region-wide access to diagnostics for priority diseases, effective collaboration with animal health authorities to reduce risks from emerging zoonoses, infection control to prevent disease transmission from health care, and effective communications to reduce individual and community risks are key to disease prevention, early detection and control. Implementing these essential components of epidemic alert and response systems will move countries of the Asia Pacific Region closer to achieving the expected results described in the APSED document. The WHO regional functions and activities include the development of guidelines, protocols and manuals of operations as technical guidance for countries. The maintenance of a regional disease database, an outbreak verification system and an event-alert and reporting system are designed to
support early warning and response to public health events of international concern. Finally, WHO has a significant role in facilitating productive partnerships among countries, partners and other stakeholders in communicable disease surveillance and response.

The WHO APSED Work Plan has identified the minimum activities to be implemented by countries, with WHO's support as required, in the first five years of APSED implementation, recognizing that some countries will have already achieved these targets and are moving towards a higher level of capacity development. The title of the WHO APSED Work Plan has been reworded slightly to reflect that this is the first five-year plan.

The TAG made six general recommendations and a number of specific recommendations to Member States and WHO after its consideration of the WHO APSED Work Plan. The TAG regards the WHO APSED Work Plan as necessary to meet the surveillance and response requirements under the IHR (2005) and strongly endorsed its implementation. The TAG stressed that all countries in the Asia Pacific Region develop a national implementation plan to support the establishment and maintenance of the core capacities required under the IHR (2005) and to ensure the implementation of the Asia Pacific Strategy for Emerging Diseases.

The TAG also recommended regional support to countries be prioritized in accordance with the baseline level of capacity in communicable disease surveillance and response. All countries are encouraged to implement the emergency arrangements for avian and pandemic influenza as soon as possible.

The next steps include revision of the WHO APSED Work Plan to reflect the TAG's recommendations. Key short term activities include convening working groups for each of the six key activity areas to drive implementation, and developing a checklist for countries based on the WHO APSED Work Plan as an aid for country work plan development.

A date for the next TAG meeting has not yet been determined but will occur within the next 12 months in the South-East Asian Region.
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Keywords:
Communicable diseases, Emerging/communicable disease control
1. INTRODUCTION

1.1 Objectives

Dr Takeshi Kasai, Regional Adviser in Communicable Disease Surveillance and Response, in the Western Pacific Regional Office, discussed the objectives of the meeting:

(1) to discuss the current situation on emerging infectious diseases and assess the capacity for response;

(2) to review and revise the draft WHO APSED Regional Implementation Plan, including regional priorities and targets; and

(3) to identify priorities and make recommendations on future steps on emerging infectious diseases response.

1.2 Opening remarks

In his opening remarks Dr Richard Nesbit, Acting Regional Director WHO Regional Office for the Western Pacific, gave a summary of the infectious diseases that had emerged in the Asia Pacific Region over the last two decades, including Nipah virus, SARS and highly pathogenic avian influenza A/H5N1. All these events caused high morbidity and mortality and have had a profound negative economic impact in affected areas. Asia was the epicentre of SARS with 95% of all cases, and to date, 84% of human cases of A/H5N1 have been reported from Asia. In Viet Nam alone, 44 million poultry were destroyed along with many millions more culled throughout the world as a result of highly pathogenic avian influenza.

The countries in the Asia Pacific Region have coped well with "ordinary" disease outbreaks but remain vulnerable to challenges posed by "extraordinary" events such as SARS and avian influenza. Currently, countries in the Region are actively preparing for the "worst case scenario" in disease outbreaks with the adoption of the revised International Health Regulations (2005) and its accelerated implementation for avian and pandemic influenza threats. Endorsement of the IHR (2005) by the 58th World Health Assembly was a landmark decision in the control of disease outbreaks and gave WHO the mandate to respond to public health events of international concern.

The Asia Pacific Strategy for Emerging Diseases (APSED) has biregional endorsement as the strategic document to guide countries of the Asia Pacific Region in implementing the core capacity requirements of the IHR (2005) as they relate to communicable disease prevention and control. The purpose of the TAG meeting was to review and revise a draft WHO biregional work plan to operationalize APSED towards strengthening country and regional capacity in communicable disease surveillance and response with support from regional partners.
Dr Nesbit thanked the representatives from Member States, regional partners, WHO Geneva and Regional and Country Officers of WHO for attending the meeting and anticipated effective outcomes.

1.3 Appointment of Chairperson, Vice-Chairperson and Rapporteur

Announcement of the establishment of the TAG and nomination of TAG Chair, Vice-Chairs and Rapporteur

Dato' Dr Tee Ah Sian, Director, Combating Communicable Diseases, Regional Office for the Western Pacific, announced the establishment of the TAG for Emerging Infectious Diseases comprising nine members, presented apologies for absentees, Professor NK Ganguly, Dr Tatsuo Miyamura, Professor Angus Nicoll, Dr Anne Schuchat and Dr Viroj Tangcharoensathien, and introduced their representatives. The TAG was convened to provide independent advice to the Regional Directors of the Regional Office for South-East Asia and the Regional Office for the Western Pacific and Member States were selected for their technical expertise.

Dr Nobuhiko Okabe was elected Chair of the meeting representing Dr Tatsuo Miyamura, and he was assisted by Vice-Chairs Ms Ann Moen (representing Dr Anne Schuchat) from the Western Pacific Region and Dr Shiv Lal from the South-East Asian Region. Professor John Mackenzie was elected Rapporteur.

2. PROCEEDINGS

2.1 Presentations

Session 1. The current situation: emerging infectious diseases

The session provided situation updates on the impact of emerging infectious diseases in the world and the Asia Pacific Region to provide meeting participants with a foundation for discussion of capacities needed to meet such threats.

The global situation—Dr Michael Ryan, Director, Epidemic and Pandemic Alert and Response, WHO Geneva

Dr Ryan provided an overview of the global response to public health events of international concern (PHEIC). Epidemic-prone diseases will continue to emerge and re-emerge and WHO has verified over 1100 PHEIC from 2001-2006. WHO provides support to countries in the areas of epidemic alert and response by utilizing its international mandate, decentralized structure and capacity. Dr Ryan reminded the meeting of the ever present threat posed by infectious diseases – the resurgence of cholera, the spread of diseases such as Rift Valley Fever to new areas, the risk of accidental release of biological agents from laboratories, the proliferation of laboratories and concerns about bio-containment, and finally the risk of deliberate release of pathogenic agents. Of the emerging infectious diseases (EIDs) of humans, 75% are zoonotic, with wildlife being an increasingly important source of inter-species transmission. There have been a number of laboratory accidents resulting in human infections and deaths from dangerous pathogens.
WHO has gained experience in epidemic alert and response, particularly field operations, and has formed important partnerships through the Global Outbreak Alert and Response Network (GOARN). WHO has also developed capacity in implementing mass interventions rapidly, such as the administration of antibiotics and vaccination during meningococcal meningitis outbreaks.

Dr Ryan highlighted the key lessons learned from emerging infectious disease outbreaks.

- The world will continue to remain vulnerable to infectious diseases as a result of microbial evolution and human activities that increase the risk of human infection. Even relatively small outbreaks can stress health services and social and economic systems.

- There is a need to strengthen public health systems for generic responses to disease threats; however, countries and partners also need to develop specific preparedness arrangements for specific threats such as avian and pandemic influenza. Therefore preparedness for emerging infectious disease threats must balance investment between generic strengthening of alert and response capacities and specific programmes.

- WHO is most effective in its support to Member States when it works through partnerships and in a coordinated fashion. The IHR (2005) specifies international compliance with a single system of alert and response operations. Effective working relationships have been forged when collaboratively dealing with major disease threats. These relationships have been based on mutual need and mutual benefit, collective responsibility, transparency, personal commitment and pride in our organizations and systems.

- Collective responses and mutual support will not be sustainable in the context of pandemic influenza without a major investment in national regional and global public health.

The situation in Asia Pacific Regions—Dr Khanchit Limpakarnjanarat, Medical Officer, Communicable Diseases Surveillance and Response, the Regional Office for South-East Asia

The Asia Pacific Region extends from the Arabian Gulf to the Pacific and is one of the most populated regions of the world. The Region includes large urban centres of high density which continue to grow because of rural to urban migration, and major international travel and trade hubs. Important infectious diseases in the Region include SARS, A/H5N1, dengue fever/dengue haemorrhagic fever, Nipah virus, Japanese encephalitis, Human Foot and Mouth Disease and rabies. The economic impact of avian influenza has been considerable; 200 million poultry have died or been culled since 2003 mainly in Viet Nam and Thailand.

Dr Limpakarnjanarat identified the following issues and needs in the Region based on the experience of SARS, avian influenza and dengue fever.

- There is an urgent need to build national capacities in epidemic alert and response, including cross-border and inter-country surveillance and response activities.

- Priority should be given to enhancing collaboration between animal and human health surveillance and for the timely sharing of information across sectors.
• Human resources development, including the training of field teams of medical and veterinary epidemiologists with field experience to work with clinicians and laboratory scientists.

• Strengthening collaboration between local public health and animal health partners, countries and international partners, and horizontal collaboration between WHO Country and Regional Offices is essential for early alert and response to emerging infectious diseases.

• Resource mobilization.

Session 2. Update on the IHR (2005)

The expected outcomes of this session are raised awareness and understanding of the new obligations under the IHR (2005), its relationship to APSED, and the actions to be taken by countries to implement the core capacities for communicable disease surveillance and response described in both.

Overview of IHR (2005)—Dr Max Hardiman, Coordinator, International Health Regulations, Epidemic and Pandemic Alert and Response, WHO Geneva

The purpose of the IHR (2005) is essentially the same as the IHR (1969), namely to prevent the spread of infectious diseases while avoiding unnecessary interference with international travel and trade. Dr Hardiman described the following key changes to the IHR (2005):

• Broadening of the scope to include all infectious disease outbreaks, chemical incidents and radiological incidents constituting a public health event of international concern.

• The obligation to establish core national capacities in disease surveillance and response.

• The need to establish a national IHR Focal Point with 24/7 coverage requiring a structure rather than an individual.

• A move from fixed measures against disease threats to recommendations that can be tailored to specific events.

• Greater emphasis on human rights, personal data protection, and improved cooperation between States Parties to the IHR (2005), and between States Parties and WHO.

The IHR (2005) will enter into force (become legally binding) in June 2007. The key to successful implementation is national capacity strengthening in the areas of surveillance and response, points of entry, and legislative changes. International organizations need to support countries to achieve the necessary capacities, and global alert and response systems must be made more operational. The IHR (2005) demands a degree of standardization between regions and countries in the capacities required under the IHR. There is no specific funding mechanism included but there are obligations requiring countries and international bodies to collaborate in fund raising for capacity-building.
The Voluntary Compliance Resolution WHA59.2 urges States to advance their preparations for implementation of the IHR (2005), primarily in response to the pandemic influenza threat. International capacities are being developed to support countries in surveillance and response, points of entry and legislative requirements, operationalize the IHR through the GOARN mechanism and ensure IHR procedures, committees and reporting mechanisms are in place.

Dr Hardiman described the next steps in IHR (2005) implementation as raising political and technical awareness and commitment, designation of the IHR Focal Points, analysis of the legal text in order to update legislation, and national capacity assessments and national plans of action.

**Country obligations under IHR (2005)**—Dr Gilles Poumerol, Coordinator, WHO Lyon Office for National Epidemic Preparedness and Response

The function of the WHO Lyon office is national capacity strengthening for implementation of the IHR (2005). The IHR includes a disease list and a decision instrument to assist countries in their risk assessment of whether a disease event constitutes a PHEIC. Each country must notify WHO of all PHEIC within its borders within 24 hours of assessment, and verify unofficial reports of PHEIC within 24 hours of a WHO request. Notification to WHO is on a confidential basis. Included in the IHR (2005) is a requirement to notify single cases of smallpox, poliomyelitis due to wild-type poliovirus, SARS and human influenza caused by a new sub-type because of their importance to international public health.

Countries are obliged to build capacity for early detection, outbreak investigation, laboratory capacity and disease reporting, and to establish and train epidemic response teams. Core capacity requirements have been defined for the local community level, sub-national level and national level. Each country is required to complete an assessment of surveillance and response capacities within two years.

WHO Lyon is developing monitoring and evaluation tools and a global network of partner institutions that can support IHR implementation.

**Linkage with APSED**—Dr Li Ailan, Medical Officer, Communicable Diseases Surveillance and Response, WHO Regional Office for the Western Pacific

WHO and countries in the Asia Pacific Region have jointly developed the Asia Pacific Strategy for Emerging Diseases. The APSED was developed to address the continuing threat of infectious diseases and meet the core capacity requirements for communicable disease prevention, surveillance and response under the IHR (2005). APSED has five interrelated objectives—risk reduction, early detection, rapid response, preparedness and the formation of technical partnerships. Given the many overlaps between operationalizing APSED and IHR implementation, close collaboration between public health agencies and the IHR Focal Point is needed in each country if the IHR Focal Point differs from the responsible agency or staff for APSED implementation.

**Discussion of the IHR (2005)**

This series of presentations generated considerable discussion. Issues included difficulties encountered in: (1) shipping biological specimens; (2) changing national legislation to meet the requirements of the IHR (2005) in a timely fashion; and (3) sensitivities around sharing samples with foreign laboratories and information sharing. Dr Hardiman reported that WHO is working with IATA and other organizations to resolve problems associated with regulations for the
shipment of biological specimens. With respect to legislative changes, Dr Hardiman assured participants that there are provisions in the IHR (2005) to give countries additional time to meet the legal requirements even after they have implemented the main provisions. The IHR (2005) contain regulations on the fair treatment of infected persons or persons under investigation for an infectious disease, confidentiality provisions and the safe handling of sensitive data.

WHO was asked whether sub-national focal points were required in federally organized countries. The IHR (2005) only requires the establishment of a national IHR Focal Point; individual countries are free to establish decentralized reporting infrastructure in federated systems as required.

Session 3. Pandemic preparedness and response

The expected outcomes of this session were familiarization with the self-assessment tool for tracking pandemic preparedness plans, identifying the next steps in pandemic preparedness and raising awareness of WHO's roles and responsibilities in rapid response and containment of pandemic influenza.

What countries need to do to strengthen pandemic preparedness. How to assist countries to track pandemic preparedness plans—Dr Kande-Bure O'Bai Kamara, Medical Officer, Communicable Disease Surveillance and Response. WHO Regional Office for South-East Asia

Historically, there has been an average of 3 pandemics per century at 10–50 year intervals. The last pandemic occurred in 1968 so the world is “overdue” for another pandemic. Outbreaks of A/H5N1 avian influenza in 54 countries have been reported since 2003. Dr Kamara announced that globally 176 of 194 countries now have pandemic preparedness plans, and notably all countries in the Asia Pacific Region. However, some plans are still not integrated between animal and human health services, and many plans do not have a multisectoral focus, particularly given that the impact of pandemic phase 6 will involve all sections of society, social, economic and political functioning.

WHO recommends that all pandemic preparedness plans include five components:

- coordination
- prevention and control
- rapid detection and response
- health services management
- risk communication

The challenge will be to operationalize and implement pandemic preparedness plans. Key components and resources needed to operationalize pandemic plans effectively include:

- trained staff and strong public health infrastructure
- collaboration between countries and with regional partners
- safe clinical case management and infection control
- laboratory capacity
- stockpiles of Personal Protection Equipment (PPE), antiviral and antimicrobial drugs and possibly vaccines
- non-pharmaceutical interventions, including social distancing
- a risk communication strategy that incorporates corporate communications (e.g. outbreak communications via the media), IEC materials and communications reduce risky behaviours (e.g. unprotected contact with dead or sick poultry) and promote healthy behaviours (e.g. hand washing, food safety).

WHO strategy for pandemic Influenza—Dr Michael Ryan, Director, Epidemic and Pandemic Alert and Response, WHO Geneva on behalf of Dr Keiji Fukuda, Coordinator, Global Influenza Programme, WHO Geneva

Dr Ryan provided a summary of the global distribution of avian influenza in poultry and the cumulative number of human cases. Outbreaks of A/H5N1 in poultry have occurred in 31 new countries since 1 February 2006. The three conditions for a pandemic are the emergence of a novel influenza strain, animal-to-human transmission of a virus highly pathogenic for humans, and efficient human-to-human transmission. Fortunately, there is no evidence of efficient transmission among the small number of clusters in which human-to-human transmission has occurred—child-to-mother, patient-to-physician, and spread among family members caring for a sick relative.

These transmission events have occurred during intense exposure to an ill person. Humans remain accidental victims of an animal virus. There is a window of opportunity to fundamentally strengthen national and international public health systems for alert and response to emerging infectious diseases using the resources made available for the control of avian influenza and pandemic preparedness activities.

Dr Ryan stressed the following areas for action:
- decreasing the risk of human exposure to infected animals
- strengthening early warning and response systems
- intensifying rapid containment operations
- building coping capacity of systems and societies (political commitment, command and control mechanisms, communications, collaboration and resources)
- coordinating applied research
- expansion of vaccine production capacity

The concept of “collective ownership” of data as a global public good is key to the research and development required to support global health security. Dr Ryan recognized the difficulties inherent in this concept, particularly given existing inequities in access to affordable pharmaceuticals and vaccines developed as a result of shared clinical specimens. Currently global influenza vaccine production capacity is 300 million doses annually. Over 95% of production occurs in five countries. WHO is developing a global strategy for pandemic
influenza vaccine production aimed at accelerating production and making vaccines more affordable to developing countries. WHO has also secured a stockpile of 2 million treatment courses of antivirals for rapid response and containment.

**Introduction to rapid response and containment—Dr Hitoshi Oshitani, Tohoku University Graduate School of Medicine, Sendai, Japan**

Dr Oshitani provided background to the mathematical modelling that underpins the concept of rapid response and containment of emerging pandemic influenza at the outbreak source. If aggressive measures are applied early in the course of the outbreak, transmission may be stopped or slowed by targeted antiviral prophylaxis similar to “ring” vaccination used to contain smallpox. Dr Oshitani used a hypothetical outbreak situation to demonstrate how pandemic influenza may spread at source and the application of rapid response and containment in such an event.

The components of the WHO Rapid Response and Containment Strategy are:

- detection and reporting
- risk assessment and decision making
- mobilizing resources
- implementing the containment strategy
- monitoring the spread of disease within the affected community for a refinement of the risk assessment.

The window of opportunity for rapid containment is very limited and success will depend on the number of initial cases, the size of the coverage area, the transmissibility of the virus, population density at the site of emergence, and whether the pandemic strain emerges from a mutation or recombination event. A novel strain resulting from a recombination event is more likely to be attenuated (less virulent) than a mutation, and hence possible harder to detect quickly.

**WHO draft protocol for rapid response and containment—WHO and country roles—Dr Takeshi Kasai, Regional Adviser Communicable Diseases Surveillance and Response, WHO Regional Office for the Western Pacific**

Dr Kasai outlined the process leading up to mobilization of the rapid response and containment strategy.

- Detection and rapid reporting of early signals of efficient human-to-human transmission. Epidemiological signals are likely to be most sensitive indicators.
- Outbreak verification and the collection of epidemiological data for the risk assessment and decisions about the feasibility of containment. Critical specimens will also be collected for urgent testing to confirm a pandemic strain.
- Collective decision making based on the risk assessment within the country and in collaboration with WHO and partners.
• Implementation of targeted antiviral prophylaxis for rapid containment if technically feasible.

• Regardless of the feasibility containment activities, response to avian influenza and emerging pandemic influenza must be rapid to limit morbidity, mortality and further transmission.

Dr Kasai stressed the fact that standard public health measures should be put in place at the outset while awaiting the results of laboratory testing and the feasibility of rapid containment is being assessed—namely case isolation and infection control, contact tracing and monitoring for symptoms and signs of influenza, antiviral prophylaxis and contact education, and health promotion/social mobilization for personal and community protection.

Preparation for rapid containment must occur at regional and country levels, including incorporating rapid response and containment as a component of national pandemic influenza plans.

**Plenary interactive discussion on pandemic preparedness and response—Chair, Dr Hitoshi Oshitani**

Dr Oshitani raised a number of questions to assist countries in assessing the components of their pandemic plans. Indicators of progress were “not yet started”, “draft currently under development”, “plan finalized but not yet endorsed by government” and “plan approved by government”.

The issues canvassed were:

• How to develop and track national pandemic preparedness plans.

• Whether plans involved sectors other than health and/or were linked to other emergency preparedness plans.

• Gaps in capacity for pandemic preparedness at national and local levels.

• Whether plans include clearly defined the phase level of interventions.

• Actions required to mitigate the impact of the pandemic during phase 6 (pharmaceutical interventions—vaccines and antivirals; standard public health measures—case isolation, contact tracing and quarantine and hospital infection control, and non-pharmaceutical interventions—social distancing, personal protection, and border controls).

• Testing and revision of existing plans.

• Whether existing pandemic plans have provisions for rapid response and containment.

• Major obstacles to implementing rapid containment measures.

• Problems in receiving the regional and international stockpiles.
• Whether APSED is a useful framework to strengthen capacity for pandemic preparedness.

Poster sessions on pandemic preparedness

TAG members, Dr Donglou Xiao and Dr Brenda Ang each chaired a poster presentation session. Country representatives were invited to present details of their preparedness plans.

Bhutan

The lead agencies for avian and pandemic influenza preparedness and response in Bhutan are the Ministries of Health and Agriculture. A draft national pandemic influenza preparedness plan was completed in September 2005. Bhutan remains free of avian influenza at present so activities have focused on raising awareness about the clinical presentation of avian influenza in poultry. Bhutan imports most of its domestic poultry from India and the country is on the migratory bird flyways from China and Siberia. Strategies include a national stockpile, training of health care workers and agricultural extension workers and the production of IEC materials.

Cambodia

Cambodia had its first human case of avian influenza in January 2005. To date, the Ministry of Health has led the engagement with other ministries, but only interacting at a technical level. The national pandemic plan is based on existing structures, simplicity and flexibility. Activities have been undertaken to support broader system strengthening of public health and emergency management. Elements of the Cambodian plan are: rapid response and containment; a national communication strategy; interministerial coordination; surveillance; clinical case management and infection control. Work is underway to establish influenza-like illness surveillance, and training village health volunteers and other health care workers to recognize unusual disease events at community level. Cambodia has a National Influenza Centre (NIC) at the Pasteur Institute and capacity is being built at National Institute of Public Health with a view to becoming an NIC. Once policy documents have been endorsed at Prime Ministerial level, the National Committee on Disaster Management can assist other ministries in their pandemic plans. Two national workshops have been held to prepare the health sector and several have been facilitated by the United Nations system to support interministerial cooperation during a pandemic. A desk top exercise is planned for September 2006 to test action areas and identify gaps.

China

The Ministry of Health in China developed its National Influenza Response and Preparedness Plan in 2005. The document incorporates preparedness, coordination, operational responsibility and response. The Plan identifies three phases—the preparatory phase, pandemic phase and post-pandemic phase. Each phase of the plan details operational steps, strategies and linkages to various ministries at different levels of government. The Ministry of Health collaborates with the Ministry of Agriculture, the Inspection and Quarantine service and the General Administration of Quality Supervision in pandemic preparedness. Provincial influenza response and preparedness plans have been developed and assessed in 27 of 31 provinces. Research and development is seen as an important preparedness activity.
Fiji

The Fiji National Communicable Disease Surveillance Plan has been endorsed in principle. The Plan already incorporates pandemic preparedness with four strategies identified—monitoring and surveillance; communication (IEC); clinical management; and coordination between 20 government ministries. The major challenge for the formalization of the plan is maintaining political commitment and bipartisan support.

Indonesia

The Indonesian Pandemic Preparedness Plan is anchored on the following principles—transparency; outbreak control and prevention of new infections; prevention for identified high-risk groups; surveillance; communication (IEC); case management and infection control; and research and development. All sectors responsible for the implementation of the pandemic plan are being coordinated by their responsible ministries. Indonesia is implementing six national strategies—outbreak control and prevention of avian influenza in poultry, biosecurity protection for high-risk groups, surveillance, IEC, case management and infection control, and research and development.

Lao People’s Democratic Republic

The Lao People’s Democratic Republic is currently developing a National Strategic Plan for Pandemic Influenza in cooperation with the United Nations. The plan will focus on animal health, surveillance and response, curative and laboratory services, and institutional strengthening. The plan also includes three measures to strengthen the response capacity of the national centre for disease control, develop a national stockpile and develop a national legal framework compliant with the IHR (2005). Support is being provided to provincial pandemic preparedness processes which will include government, nongovernmental organizations (e.g. Lao Red Cross) and private stakeholders. Coordination is being improved through strengthening the authority of the Communicable Disease Control Committee to reflect its multisectoral responsibilities for emergency preparedness and response at all levels. Village health volunteers and other health care workers are being trained to recognize unusual disease events at community level. The mass media will be involved at all levels for IEC and health promotion. Plans are also underway to run desktop pandemic simulation exercises as well as functional exercises.

Malaysia

A national pandemic preparedness plan was launched by the Malaysian Ministry of Health this year. It encompasses the organizational response, medical response and risk communication strategy. Malaysia has developed a stockpile of antivirals and seasonal influenza vaccine for health care workers. The Ministry of Health is the lead agency for the pandemic response and has identified roles and responsibilities. A planning committee of eleven ministries collaborating with the National Security Council has been established. A special policy (Directive 20) is in place whereby all government departments can be directed to support the pandemic response as required.
Maldives

To date there have been no avian influenza outbreaks in the atolls. There is strong political commitment to pandemic preparedness in the Maldives, and a Technical Task Force and National Pandemic Preparedness Committee have been established. The national pandemic preparedness plan was last updated on 28 March 2006, and includes IEC and the development of the response system within the country. At the grassroots level, staff on 16 of 20 atolls have received training and a focal point has been identified in all the atolls. The greatest risk of avian influenza for the Maldives is considered to come from migratory birds, specifically waterfowl. Livestock importation has been banned.

Mongolia

Mongolia is undertaking the following actions as part of pandemic preparedness—distribution of the draft national pandemic plan for review, establishment of a coordination committee, strengthening of early warning and response systems, stockpiling antivirals, seasonal influenza vaccines for risk groups, PPE and other supplies, and strengthening of human resources through training. A Coordination Committee has been established to lead development and implementation emergency state operation plan at all levels (intersectoral). A total 5634 people were vaccinated in 2005–2006 against seasonal influenza and 9800 doses of human vaccine have been distributed. Key challenges are upgrading laboratory capacity, expansion of the early warning and response system, intensify public education and advocacy and improve professional capacity of health and veterinary workers.

Nepal

Nepal’s national pandemic influenza preparedness plan was endorsed by Cabinet in February 2006. The focus is initially on avian influenza in poultry and migratory birds as well as the multiple transit points of human travel between Nepal and India. Poultry are mainly imported from India and some from China (23 million broiler chickens per year). A budget has been developed for the human health response. The Nepalese plan encompasses all of the core component of pandemic preparedness—coordination between human and animal health authorities, early warning systems for avian and human influenza, rapid response, clinical case management and infection control and communications. There are no laboratory facilities for H5 in-country. Consideration is being given to seasonal influenza vaccination of health care workers.

Papua New Guinea

The plan aims at outlining the arrangements for the management of avian influenza in humans and pandemic influenza in Papua New Guinea. Objectives of the national pandemic preparedness plan are to: ensure adequate surveillance in place to rapidly detect, diagnose, characterize and respond to a pandemic influenza virus; prevent the spread of avian influenza virus from its native host (wild birds) into and among domestic poultry or other non-native species, including humans; limit pandemic spread through early containment measures; limit morbidity and mortality from infection during a pandemic; and ensure essential services during a pandemic, sustain infrastructure and mitigate the impact to the economy and the functioning of the society. Key elements of the plan are: preparedness; surveillance for avian influenza migratory waterfowl and domestic poultry; the establishment of hospital-based and health centre-based sentinel surveillance for influenza-like illness; laboratory surveillance; health services emergency planning; training; public health measures; and communications. The Ministries of
Health and Agriculture are the lead agencies in preparedness planning but Papua New Guinea is currently in the process of expanding the plan to make it multisectoral. A high level coordination committee and a technical task force have been established to guide the response.

**Philippines**

The Philippines’ pandemic preparedness plan is a living document which is also aimed at strengthening the management structure for all emerging infectious diseases. A national task force has been convened involving the Departments of Health and Agriculture and the poultry industry. Key activities include provincial, city and municipal planning workshops, village health and emergency response teams, Speakers’ Bureau training, business and civil society organization meetings, IEC materials including a website and television advertising and table top exercises. The Philippines has laboratory capacity for animal and human isolate testing and is working on improving specimen transport and storage. Health alerts are being sent by SMS messaging. A training programme has been completed at 20 critical sites (130 municipalities; 416 persons). Initial screening will occur at the local level with 21 referral hospitals identified and influenza hospitals. The Philippines has also established a national stockpile of antivirals and PPE.

**Sri Lanka**

Sri Lanka is advanced in its avian and pandemic influenza preparedness planning. The lead agencies are the Ministry of Health and Ministry of Estate Infrastructure and Livestock Development. A joint national steering committee and a joint technical committee were established in collaboration with the Ministry of Livestock Development to progress pandemic preparedness activities. The objectives of the national influenza pandemic preparedness plan are: reduce transmission and opportunities for human infection from infected animals; strengthen early warning systems for early and coordinated response to outbreaks; contain or delay the spread of virus at the source; reduce morbidity and mortality and minimize social disruption; and monitor and evaluate the evolving response to a pandemic. Sri Lanka has banned the importation of all poultry and pet birds and is carrying out surveillance on bird droppings in bird sanctuaries. Twenty human sentinel surveillance sites have been established with improved isolation facilities and stockpiles of antivirals and PPE. There is limited polymerase chain reaction capacity for testing human isolates at the national level. Laboratory staffs were trained in Hong Kong (China)

**Thailand**

The last human case of A/H5N1 was in November 2005. Pandemic preparedness planning is well advanced in its avian and pandemic influenza preparedness planning. Operational plans have been developed by the Ministries of Health and Agriculture and some other ministries. Key strategies include: surveillance and rapid response teams; over 100 Field Epidemiology Training Programme alumni have received additional training; over 100 000 village volunteers have been mobilized to carry out surveillance; laboratory capacity has been strengthened with virus sequencing now being carried out in-country; IEC materials; the media is being used for rumour surveillance; and the government pharmaceutical organization is exploring options for the production of initially low-cost seasonal influenza vaccine for high-risk populations. Some private sector business continuity planning is underway (e.g. banks). Table top exercises have been designed and tested; functional drills are being developed.
Viet Nam

The objectives of the Viet Nam national pandemic plan are to: contain an emerging influenza pandemic, preventing a nationwide outbreak; restrict the incidence and mortality rates caused by influenza; and ensure adequate preparedness and effective response to a pandemic. Important factors in pandemic preparedness in Viet Nam are achieving a high level of political commitment at all levels of government, the establishment of a National Steering Committee for SARS/Influenza Pandemic chaired by the Minister of Health, a National Steering Committee for Avian Influenza chaired by the Minister of Agriculture, and provincial, district and community-level planning and response structures. Key departments within the Ministry of Health involved in pandemic preparedness include the Viet Nam Administration of Preventive Medicine, the Department of Therapy, the Department of Planning and Finance and the Department of Legislation. Key strategies include: surveillance; clinical case management; EIC materials; and local exercises to test coordination, hospital management, field hospitals and outbreak response teams.

Session 4. The WHO APSED Work Plan

The objectives of this session were to provide an overview of the WHO APSED Work Plan to the meeting participants and provide a forum for discussion.

Dr Kasai described the overall direction of the plan as:

- Moving from a reactive approach to emerging infectious diseases to a proactive approach by reducing country and regional vulnerability through preparedness.

- Implementing urgent activities, directed especially at avian and pandemic influenza preparedness, to support long-term objectives in strengthening communicable disease surveillance and response capacity throughout the Asia Pacific Region.

- Strengthening evidence-based health action through collaborative research, information gathering and assessment tool development, development of management guidelines for disease control, and working more effectively with partners.

A series of presentations were given by the Communicable Disease Surveillance and Response team, WHO Regional Office for the Western Pacific, on implementation of the Work Plan by programme area.

Overview and structure of the WHO APSED Work Plan—Dr Wang Wenjie, Communicable Disease Surveillance and Response, Regional Office for the Western Pacific

Dr Wang Wenjie described the relationship between the objectives of APSED and structure of the Work Plan. The guiding principles of APSED implementation are: the primary focus on country activities supported by partnerships, building on existing structures and partnerships so that capacity strengthening is sustainable; and ensuring evidence-based approaches. Networks and partnerships are mechanisms to optimize the use of limited resources and provide equity of access to regional and global public goods through implementation of the APSED.
Outputs at the regional level will include an information and event management system and the establishment or strengthening of mechanisms for rapid response, monitoring and provision of technical assistance to countries and partnerships.

**Surveillance and response — Ms Amy Cawthorne, CSR Regional Office for the Western Pacific**

Currently, there are variations in capacity to detect and respond to emerging infectious diseases across the Asia Pacific Region. The aim of APSED implementation in this area is that by 2010, all countries will have:

- An early warning response system (EWARS) for avian influenza.
- Health care facility or community-based EWARS for events of unknown aetiology.
- Appropriately integrated and effective surveillance systems for priority emerging infectious diseases.
- At a minimum, a response capacity at the central level with clear links to early warning and response systems for avian influenza, events of unknown aetiology and other priority EIDs.
- As far as possible, response capacity to be developed at the local level.

Strategies to achieve these targets include: baseline assessment of surveillance and response capacity; strengthening, development and evaluation of surveillance and response systems; human resources development; raising awareness; modernizing public health legislation in accordance with the IHR (2005); and building partnerships.

**Building laboratory capacity — Dr Isabelle Bergeri, CSR Regional Office for the Western Pacific and Dr Rajesh Bhatia, Regional Office for South-East Asia**

The laboratory component of the WHO APSED Work Plan has been developed to provide a comprehensive structure for implementing activities to build the laboratory capacity mandated by the IHR (2005) and APSED. The purpose of the laboratory work plan is to ensure the delivery of effective, efficient, accessible, timely and reliable laboratory services. This will be achieved by:

- The assessment and mapping of existing laboratory services to ensure that all countries have access to diagnostic services.
- Review of policy and legal/regulatory system development for laboratory practice and the financing structures of the laboratory services in countries in order to support their development.
- Improving quality assurance.
- Improving bio-containment and bio-safety practices.
- Building laboratory capacity to participate in surveillance and response.
- Participation in applied research to improve diagnostics.
Zoonoses — Dr Bee Lee Ong and Dr Francette Dusan, CSR Regional Office for the Western Pacific

This component of regional capacity strengthening will be implemented in two phases. Phase 1 involves building multisectoral mechanisms for information exchange and collaborative response at the regional level and Phase 2 occurs at the country level. Key areas for multisectoral collaboration are risk reduction, surveillance, response and research on the animal-human interface that leads to disease emergence or interspecies transmission. Activities in each area include developing guidelines, toolkits and training materials, conducting joint exercises and simulations in the early detection of emerging zoonoses and rapid response, and regional participation in applied research for new knowledge acquisition to revise policies and interventions.

Infection control—Dr Richard Brown, WHO Viet Nam

Objective 1, Expected Results 3 and 5 of APSED relate to reducing the risk of health care-acquired infections control and strengthened containment of antimicrobial resistance respectively.

Regional priorities in reducing health care-associated infections include developing infection control guidelines, training materials and field-tested infection control assessment tools; supporting countries to carry out infection control assessments and to establish national infection control plans; facilitating training on infection control; establishing and maintaining a technical working group on infection control; and coordinating technical partnerships.

Risk communication—Dr An Ni, CSR Regional Office for the Western Pacific

Effective communication is crucial to effective alert and response activities. This presentation highlighted the fact that risk communication is a key element of risk management and goes beyond corporate communications and dealing with the media. Effective communications are critical to the success of Objectives 1, 3 and 4 of APSED — reduce the risk of emerging diseases, strengthen early response and strengthen preparedness. In the WHO APSED Work Plan, risk communication includes all forms of communications required to reduce vulnerability of individuals, communities and countries to EIDs.

Regional activities—Mr Noel Orosco, CSR Regional Office for the Western Pacific

The APSED Work Plan identifies country-support activities and regional activities. Regional activities include the development of guidelines, protocols, manuals of operations, the maintenance of a disease database, an outbreak verification system and an event-alert and reporting system.

The five key action areas for strengthening regional capacity are:

- regional information and event management system
- WHO guidelines or tool development
- operational research for decision-making and evidence-based health actions
- policy/strategy development, monitoring and partnerships
strengthening of technical capacities through sustainable human resources development.

Questions and clarification – plenary discussion

General discussion raised the issue of sustainability of activities proposed under APSED, the importance of human-induced ecological and environmental drivers of emergence, the need to consider workforce development in a broad sense, and prioritization of countries for technical assistance. Public health systems should be well placed to advocate for sustainable funding to implement APSED because of its close link to the requirements for capacity-building under the IHR (2005) and because APSED provides a biregional agreed framework on which to base funding and other resource requirements. Dr Kasai agreed that prioritizing support to countries with the least capacity in epidemic alert and response was an important next step.

Feedback from the Interagency Coordination Committee (ICC)

Partner Agencies: Dr Jacques Jeugmans (Asian Development Bank); Mr Jonathon Abrahams (Asian Disaster Preparedness Center); Dr Elizabeth Miranda Food and Agriculture Organization; Dr Tom Kiedrzynski (Secretariat of the Pacific Community); Dr Osman Mansoor (United Nations Children’s Fund); Dr Koji Nabae (UN System Influenza Coordination); Dr Florence Tienzo (World Bank); Dr Sean Tobin (Australian Department of Health and Ageing); Dr Yasukata Fukahori (Ministry of Foreign Affairs, Japan); Dr Norito Araki (Embassy of Japan in the Philippines); Dr Toru Chosa (Bureau of International Cooperation, International Medical Center of Japan); Dr Hiroto Miyagi (St Mary’s Hospital, Japan); Dr Felix Li (Public Health Agency of Canada); Ms Molly Brady (United States Agency for International Development); Dato’ Dr Tee Ah Sian and Dr An Ni (WHO Regional Office for the Western Pacific).

Dr Jacques Jeugmans, Asian Development Bank, provided feedback on behalf of the ICC. The ICC commended the development of APSED and work towards progressing its implementation. Donor agencies and technical partners agreed to use the WHO APSED Work Plan to inform funding decisions for the prevention and control of communicable diseases in the Region.

The objectives of the Partners’ Forum was to establish a mechanism to improve assistance to countries of the Asia Pacific Region through more strategic funding and increased coordination.

The ICC participants agreed on the need for a matrix of regional assistance to be developed and populated by WHO with support from the ADB and United Nations System Influenza Coordination. The matrix is needed to ensure the accuracy and usefulness of donor inputs and will be shared with national governments and partners, possibly via a web site or list server.

Data will be collected at the country and regional levels, including country assessment reports and partner programme reports. Country reports will be prepared by country-level missions led by the World Bank in collaboration with national governments and development partners. These reports should be made available rapidly to all partners.

The ICC also discussed the need for focal points to be identified by each agency and partner organization to facilitate communications.
The focus of the next ICC will be agreement among partners on their support of APSED implementation.

- improving donor efficiency
- avoiding duplication of effort through complementary of activities and sharing of information
- addressing gaps in partner assistance
- coordination among agencies to streamline funding processes

Feedback from the Countries' Forum

Participants in Group 1: Dr Sok Touch (Cambodia); Dr Agus Suwandono (Indonesia); Dr Ibrahim Yasir (Maldives); Dr Alexander Burmaa (Mongolia); Dr Jeetendra Man Shrestha (Nepal); Dr Luningning Villa (Philippines); Dr Tran Thanh Duong (Viet Nam); Dr Megge Miller (WHO Cambodia); Dr Liduvina Gonzales (WHO Mongolia); Dr Jadambaa Narantuya (WHO Mongolia); Dr Nerissa Dominguez (WHO Philippines); Dr Richard Brown (WHO Viet Nam); Dr Kande-Bure O'Bai Kamara (WHO Regional Office for South-East Asia); Dr Max Hardiman (WHO Headquarters; Facilitator)

Participants in Group 2: Dr Li Zhipeng (China); Dr Dorji Chewang (Bhutan); Dr Timaima Tuiketei (Fiji); Dr Phengta Vongphrachanh (Lao People's Democratic Republic); Dr Zainudin Abdul Wahab (Malaysia); Dr James Wangi (Papua New Guinea); Dr Paba Palihawadane (Sri Lanka); Dr Somsak Wattabasari (Chairperson, Thailand); Dr Reiko Tsuyuoka (WHO Lao People's Democratic Republic); Dr Jacob Kool (WHO South Pacific); Dr CK Lee (WHO China); Dr Francette Dusan (WHO China); Dr Balan Venugopalan (WHO Malaysia); Dr Khanchit Limpakarnjanarat (WHO Regional Office for South-East Asia); Dr Gilles Poumerol (WHO Lyon); Dr Li Ailan (WHO Regional Office for the Western Pacific; Facilitator).

Dr Jeetendra Man Shrestha, Ministry of Health and Population, Nepal, and Dr Paba Palihawadane, Ministry of Health, Sri Lanka, presented feedback on behalf of the Countries' Forum.

The objectives of the Countries’ Forum were to:

- Provide the country participants with further opportunities to discuss the IHR (2005) and pandemic influenza in greater detail and raise concerns.
- Share information on the current status of country preparedness for complying with the IHR (2005).
- Discuss designation of the National IHR Focal Points.
- Discuss changes to domestic public health legislation in accordance with the IHR (2005).
Awareness of the IHR (2005)

- Participants agreed that there was a high level of awareness within Ministries of Health of the IHR (2005), and some countries have started cross-sectoral discussions on IHR implementation. Multisectoral sensitization workshops were suggested as a way for Ministries of Health to further raise awareness of IHR issues. It was recommended that WHO market the IHR (2005) more aggressively to increase awareness more generally.

- Capacity-building in surveillance and response was underway in all countries. Participants raised the importance of building on existing systems e.g. early warning and response systems (EWARS) developed for other diseases. Countries of the Asia Pacific Region should work more closely with WHO Lyon to develop training materials on EWARS as part of epidemiological training. Engagement of clinicians in early warning systems was considered crucial as first responders and they need to be made aware of the IHR (2005) decision instrument to assess whether a disease event is one of international public health concern.

Points of entry

- Greater assistance was required by countries in developing their work plans for points of entry capacity strengthening. Both groups raised the urgent need for clear guidance from WHO to progress implementation of the IHR, particularly with respect to points of entry.

- Countries observed that the role of WHO Country Offices in supporting IHR implementation has not been defined.

The IHR Focal Points

- WHO clarified that there were no specific criteria for designation of the IHR Focal Points. Countries are free to decide on the appropriate agency. However, the IHR Focal Point must have the capacity to provide 24/7 coverage and collaborate effectively with all stakeholders.

- Most countries have previously designated National Focal Points but recognize the need for re-designation following published guidance; for example, some countries have a designated focal point within their quarantine and inspection services.

- Coordinating mechanisms, including donor coordination, within countries are critical to the successful implementation of the IHR but this is often a neglected issue.

- Major challenges to the success of the National Focal Points include the need to have multisectoral links; the authority to fulfil their stated roles and responsibilities (some tasks require high-level political clearance); human resources to support 24/7 coverage; and the mechanism required to manage chemical or radiological incidents as well as infectious diseases. Participants also discussed issues of confidentiality regarding the National Focal Points.

- IHR Focal/Contact Points within WHO need to be specified as soon as possible.
National public health legislation

- Updating legislation is considered key by country representatives and will require a minimum of six months for most countries. Most countries have domestic public health legislation that needs review or reactivation. Participants identified advantages to modernizing their public health legislation even if existing legislation is compatible with IHR, and the threat of pandemic influenza has stimulated political interest in revising national legislation. Countries are also reviewing their notifiable diseases lists to bring them into line with the IHR disease list.

Feedback from the TAG internal meeting

Temporary advisers: Dr Brenda Ang (Singapore); Dr Shiv Lal (India); Professor John Mackenzie (Australia); Dr Nobuhiko Okabe (Japan); Ms Ann Moen (USA); Dr Donglou Xiao (China); Dr Angela Merianos (Consultant, Australia); Dr Hitoshi Oshitani (Consultant, Japan); Secretariat: Dr Khanchit Limpakarnjanarat (WHO Regional Office for South-East Asia); Dr Michael Ryan (WHO Geneva); Dr Takeshi Kasai; Amy Cawthorne; Dr Isabelle Bergeri and Mr Guy Freeland (WHO Regional Office for the Western Pacific).

The objectives of the TAG internal meeting were to review the WHO APSED Work Plan in detail and make recommendations for its further development and implementation. Professor John Mackenzie presented a summary of the TAG’s discussion.

Professor Mackenzie highlighted the fact that APSED is a very complete and ambitious strategy which cannot be implemented in all countries of the Asia Pacific Region within the stated five years of the Strategy. Accordingly, the TAG supports the decision by WHO to identify realistic short-term targets for implementation of APSED in the Regional Work Plan and phasing of activities towards achieving the expected results described in the APSED document.

The Work Plan has distilled the minimum activities to be implemented by countries with WHO’s support as required in the first five years of APSED implementation, recognizing that some countries will have already achieved these targets and are moving towards a higher level of capacity development. The title of the WHO APSED Work Plan has been reworded slightly to reflect that this is the first five year plan. The WHO APSED Work Plan will be a living document that will be reassessed and revised annually with TAG support.

The TAG also recommended regional support to countries be prioritized in accordance with the baseline level of capacity in communicable disease surveillance and response. All countries are encouraged to implement the emergency arrangements for avian and pandemic influenza as soon as possible.

The TAG recommended that the WHO APSED Work Plan be improved by:

- clarifying the linkages between APSED and the WHO APSED Work Plan, with explicit links to the IHR (2005);
- developing a parallel check list for country implementation that complements the WHO APSED Work Plan;
- clarifying the audit tools and baseline capacities for self-assessment;
- inserting a list of references and resources.
The TAG also recommended that data be collected on the current capacities and capabilities of laboratories in the Asia Pacific Region to ensure all countries have access to diagnostics for emerging infectious diseases.

Closing session

Dr Nesbit thanked the TAG members, participating countries, regional partners and the WHO Secretariat for their work during the meeting and in their ongoing support of WHO. He was encouraged by the TAG’s endorsement of the draft WHO APSED Work Plan and the favourable comments by partner organizations. The TAG recommendations and other actions agreed to at the meeting would be put into place as soon as possible, and arrangements made to set the date for the next TAG meeting and convene the various working groups.

The meeting closed at 12:30 on 20 July 2006.
3. CONCLUSIONS

The TAG made six general recommendations and a number of specific recommendations to Member States and WHO after its consideration of the draft APSED Work Plan.

**General recommendations**

- The Asia Pacific Strategy for Emerging Diseases and WHO Work Plan for the implementation of the Asia Pacific Strategy for Emerging Diseases, 2006-2010 (APSED Work Plan) should act as the framework and guidance for countries and partners to meet the commitments of the IHR (2005) and for strengthening national and biregional capacity for communicable disease surveillance and response.

- The TAG regards the WHO APSED Work Plan as necessary to meet the surveillance and response requirements under the IHR (2005) and strongly endorses its implementation.

- The TAG recognizes that high-level political commitment and appropriate long-term resourcing at all levels involved in implementation are essential for sustainability.

- The TAG stresses the importance of human resources development, including training, recruitment and retention of staff, and appropriate health financing.

- The TAG recommends the development of regional and national baselines and development of evaluation measures.

- The TAG recommends that aspects of the WHO APSED Work Plan concerning avian influenza and pandemic influenza should be implemented as a priority across the Asia Pacific Region. These activities will also strengthen surveillance and response capacity for other emerging infectious diseases.

**Recommendations to Member States**

- Each country should develop a national implementation plan to support the establishment and maintenance of the core capacities required under the IHR (2005) and to ensure the implementation of the *Asia Pacific Strategy for Emerging Diseases*. 
Recommendations to WHO

- The TAG recommends that working groups be convened for each of the five key activity areas to drive implementation.

- The TAG recommends that outputs, outcomes and indicators are defined and related to the terminology used in APSED.

- The TAG recommends that the preamble clearly explains the relationship between APSED and the WHO APSED Work Plan.

- The TAG recommends that WHO prioritizes its support to Member States taking into account existing country capacities.

- The TAG recommends that WHO develops a second document based on the WHO APSED Work Plan to be used by countries as a check list and tool for country work plan development.

- The TAG recommends the WHO APSED Work Plan be reviewed and revised as appropriate on an annual basis with TAG assistance.

- The TAG recommends that information on laboratory capacity and capabilities in all Member States is collected as a matter of priority as part of work plan implementation and assembly of country profiles.

Issues discussed included the need to raise general awareness of the IHR (2005), APSED and its implementation plan within the Asia Pacific Region to ensure multisectoral cooperation and collaboration at national level and with regional partners and stakeholders.
AGENDA

Day 1 – Tuesday, 18 July 2006

08:00–08:30  Registration

08:30–09:30  Opening session

  Opening remarks
  Dr R. Nesbit, Acting Regional Director Regional Office for the Western Pacific

  Self-introduction

  Announcement of the establishment of the Technical Advisory Group (TAG) and nomination of TAG chairperson, vice-chairpersons, and rapporteur
  *Dato' Dr Tee Ah Sian*

  Background and objectives of the meeting
  Dr T. Kasai

  Administrative announcements

  Group photograph

09:30–10:00  Coffee break

10:00–10:30  Current situation: emerging infectious diseases

  Global situation
  Dr M. Ryan

  Situation in Asia Pacific Regions
  Dr K. Limpakarnjanarat

10:30–12:00  Update on International Health Regulations (2005)

  Overview of IHR (2005)
  Dr M. Hardiman

  Country obligations under IHR (2005)
  Dr G. Poumerol

  Complying with IHR (2005) - links to APSED
  Dr A Li

  Questions and clarifications
Annex 1

12:00–13:00  Lunch break
13:00–14:30  Pandemic preparedness and response

What countries need to do to strengthen pandemic preparedness.
How to assist countries to track pandemic preparedness plans
*Dr K.B. O'Bai Kamara*

**WHO strategy for pandemic influenza**
*Dr M. Ryan*

Introduction to rapid response and containment
*Dr H. Oshitani*

**WHO draft protocol for rapid response and containment – WHO and country role**
*Dr T. Kasai*

Questions and clarifications

14:30–15:00  Coffee break
15:00–16:00  Poster session on country pandemic preparedness plan
16:00–17:40  Discussion on pandemic preparedness

Tracking national pandemic preparedness plans

IHR in rapid response and containment and pandemic preparedness

Roles and responsibilities of WHO and country in rapid response and containment

How can APSED help countries to strengthen the capacity of rapid response and containment and pandemic preparedness?

Wrap-up

18:00  Reception
Day 2 – Wednesday, 19 July 2006

08:30–08:40  Wrap-up for Day 1
08:40–10:00  APSED Workplan

Overview and structure of APSED workplan
Dr W. Wang

Implementation by areas:
Surveillance and response - Ms A. Cawthorne
Laboratory - Dr I. Bergeri
Zoonosis - Dr F. Dusan
Communication - Dr An Ni
Infection control - Dr R. Brown
Regional activities - Mr N. Orosco
Questions and clarifications

10:00–10:30  Coffee break
10:30–12:00  Discussion on review of the Workplan
12:00–13:30  Lunch break
13:30–16:30  Technical Advisory Group (TAG) internal meeting
Informal countries' forum
Inter-agency coordination committee

Day 3 – Thursday, 20 July 2006

08:30–09:00  Feedback on discussions of partner's meeting
Questions and clarifications
Feedback on discussions of countries forum
Questions and clarifications
Comments from TAG members

09:00–10:30  Discussion on APSED/next steps

10:30–11:30  Coffee break

11:30–12:30  Closing session
TAG recommendation on the APSED Workplan
Next TAG meeting
Closing remarks
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