

Implementation of the International Health Regulations (IHR 2005) and the Asia Pacific Strategy for Emerging Diseases (APSED)

*Report of a regional meeting
Bangkok, Thailand, 24–26 June 2014*



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Acronyms

APSED	Asia Pacific Strategy for Emerging Diseases (2010)
CDC	United States Centers for Disease Control and Prevention
EOC	emergency operation centres
FAO	Food and Agriculture Organization of the United Nations
GOARN	Global Outbreak Alert and Response Network
IAEA	International Atomic Energy Agency
IHR	International Health Regulations (2005)
INFOSAN	International Food Safety Authorities Network
MERS-CoV	Middle-East respiratory syndrome coronavirus
OIE	World Organization for Animal Health
PHEIC	public health emergency of international concern
REMPAN	Radiation Emergency Medical Preparedness and Assistance Network
SAICM	Strategic Approach to International Chemical Management
UNEP	United Nations Environment Programme
USAID	United States Agency for International Development
WHO	World Health Organization

Executive summary

The International Health Regulations (IHR) and the Asia Pacific Strategy for Emerging Diseases (APSED) are two strategic frameworks for strengthening national and regional capacities to respond to public health threats in the WHO South-East Asia Region. In order to review progress made to date on the IHR core capacities implementation and to accelerate the establishment and consolidation of the core capacities within the APSED, the WHO Regional Office for South-East Asia organized a meeting in Bangkok, Thailand from 24 to 26 June 2014.

The meeting was attended by stakeholders and national IHR focal points from the 11 Member States of the South-East Asia Region, representatives from WHO headquarters and two regional offices, temporary advisers, and partner organizations. The specific objectives of the meeting were to review progress of regional IHR core capacities implementation; strengthen monitoring and evaluation of national IHR core capacities extension plans; identify resources required to strengthen national, intercountry, and regional IHR core capacities; and recommend activities to be carried out in future by the Member States and WHO. Member States presented individual country updates on progress of core capacities implementation and their respective plans of action. The meeting also specifically addressed challenges and ways to improve current capacity related to chemical and radionuclear events. In addition, the meeting initiated a discussion to identify a mechanism to sustain progress in IHR implementations beyond 2016. Participants were briefed on current public health threats and emergencies, the management of such events, and the role of emergency operation centres. Partner agencies and organizations also presented overviews of their activities supporting IHR core capacities.

The major observations of the meeting were:

- (1) Considerable progress has been made by all Member States in the past year to improve their IHR core capacities and focus areas of the APSED. The results of the IHR core capacity self-monitoring reports show that a substantial amount of work, especially in the areas of chemical, radio-

nuclear, points of entry, human resources, and preparedness, still needs to be undertaken in many countries. Nine of the 11 Member States in the South-East Asia Region requested an extension of the IHR core capacities implementation deadline until June 2016. Eight of the Member States submitted requests to the WHO Director-General with revised IHR plans of action.

- (2) Member States agree that a robust arrangement for results-based monitoring and evaluation and estimation of the financial and technical resources required to implement the IHR/APSED is lacking in their IHR plan.
- (3) The 2013 IHR review indicated that the world is not well prepared to prevent and mitigate major public health events. It is increasingly evident that multisectoral collaboration is required to combat these threats and that the health sector should play a lead role in this. IHR is the critical global instrument that carries both political and legal obligation to address these threats.
- (4) Establishing and strengthening core capacity on chemical and radio-nuclear hazards continues to be an important challenge in the Region. Besides the significant knowledge gaps observed in many Member States, there are existing national, regional, and global obligations outside of the health sector that require additional efforts to engage the relevant sectors.
- (5) It is evident that current resource constraints may prove to be a significant challenge to future IHR/APSED implementation. Developing and implementing an advocacy plan to promote resource mobilization is critical.

Group discussions supported the development of specific recommendations on the following thematic topics: strengthening chemical and radio-nuclear capacity through an all-hazards approach, monitoring and evaluation and performance indicators for IHR, and costing of IHR implementation plans and resource mobilization.

Member States were requested to:

- accelerate the development of all-hazards preparedness and response plans with the involvement of relevant sectors;

- consider how best to utilize the IHR costing tool to assist with national IHR planning, budgeting, and resource mobilization;
- document and assess the response to events/outbreaks and/or conduct exercises/simulations to test the functional aspect of the IHR;
- strengthen and establish poison centres and poison centre networks in order to support the implementation of IHR for chemical hazards;
- strengthen intercountry collaboration and regional, bi-regional, and global networking for implementation of IHR core capacities and document and share best practices in the context of IHR implementation; and
- continue to actively engage with various development partners/initiatives for strengthening IHR core capacities.

WHO was requested to:

- continue to advocate with Member States and partners to keep IHR high on public health agendas by using advocacy plans and materials;
- finalize and disseminate the costing tool and facilitate its use;
- develop guidelines and tools for risk mapping and an all-hazards preparedness and response plan;
- finalize and disseminate the APSED/IHR monitoring and evaluation tool and facilitate institutionalization of its use in Member States;
- collate information to support evaluation of APSED as a means to strengthen national capacities and explore its scope beyond 2016;
- continue to support the establishment and strengthening of emergency operation centres in Member States;
- support and facilitate the strengthening and establishment of poison centres and poison centre networks in order to support the implementation of IHR for chemical hazards;
- work with partners to mobilize technical and financial resources to support national IHR core capacity implementation;

- advocate for more formal harmonization on intercountry collaboration for implementation of IHR core capacities such as development of common standard operating procedures at points of entry;
- support Member States to implement the South-East Asia Strategy to Strengthen Public Health Response to Chemical and Radionuclear Events in the context of IHR; and
- explore opportunities with regional forums on harmonization of intercountry collaboration.

1. Introduction

The International Health Regulations (IHR) is a legally binding framework which calls for strong national core capacities to guide the preparedness for and response to potential public health emergencies. The Asia Pacific Strategy for Emerging Diseases (APSED) is a common strategy for managing emerging infectious disease threats and a bi-regional tool to meet the IHR core capacity requirements in the WHO South-East Asia and the Western Pacific regions and for establishing collective regional and global health security.

Ahead of a forthcoming IHR/APSED bi-regional meeting scheduled for 2015, it was necessary for the South-East Asia Region to convene and review its progress to date on IHR core capacity implementation in order to maintain momentum towards achieving full compliance in all Member States by 2016. A regional meeting was organized and attended by 64 participants, including stakeholders and national IHR focal points from the 11 Member States of the South-East Asia Region, representatives from WHO headquarters and two regional offices, temporary advisers, and partner organizations.

Dr Yonas Tegegn, WHO Representative to Thailand, delivered the inaugural address on behalf of Dr Poonam Khetrpal Singh, Regional Director, WHO South-East Asia. Dr Rajesh Bhatia, Director, Communicable Disease and Surveillance, WHO Regional Office for South-East Asia, presented the meeting objectives as follows:

To accelerate establishment and consolidation of the IHR core capacities in context of APSED by:

- reviewing progress in implementation of IHR core capacities in the South-East Asia Region;
- strengthening monitoring and evaluation of national IHR core capacities extension plans;

- identifying resources required to strengthen national, intercountry and regional IHR core capacities; and
- recommending activities to be carried out in future by the Member States and WHO.

Dr Pasakorn Akarasewi, Medical Officer, Ministry of Public Health, Thailand was nominated as Chairperson and Dr Geela Ali, Permanent Secretary, Ministry of Health and Gender, Maldives was nominated Co-chairperson. Dr Karma Lhazeen, Chief Programme Officer, Communicable Disease Division, Ministry of Health, Bhutan, served as Rapporteur. The agenda and list of participants are at Annexes 1 and 2.

2. Inauguration

On behalf of Dr Poonam Khetrpal Singh, WHO Regional Director for South-East Asia, Dr Yonas Tegegn, WHO Representative to Thailand, delivered the inaugural address.

In her address, the Regional Director said that the South-East Asia Region continues to face serious threats to public health security; including increasing emerging infectious diseases, natural disasters, and other public health emergencies including chemical and radionuclear incidents. Recent years have seen the emergence of avian influenza A (H7N9) and the Middle-East respiratory syndrome coronavirus (MERS-CoV), both of which continue to cause significant morbidity and mortality in susceptible populations. Although cases of these viruses have yet to be reported in the Region, WHO recognizes the shared concerns of Member States and the desire to strengthen preparedness and response against such threats. The meeting was also timely for countries who had recently requested a two-year extension for establishment of the IHR core capacities, as well as for those maintaining their implementation achievements. Therefore, the meeting presented an opportunity for Member States, WHO, United Nations agencies, and other partners to review current progress, address remaining gaps, and plan together how to achieve full IHR core capacity by 2016. Dr Singh emphasized the need for robust monitoring and evaluation of IHR implementation to generate evidence-based results, ensuring the most efficient use of resources.

The Regional Director expressed confidence that through intensive deliberations and intercountry information sharing, it would be possible to identify the optimum combination of actions and approaches to meet the current challenges and find ways to support IHR implementation in the context of the APSED keeping in mind country specific situations and priorities.

3. Overview of the IHR and APSED

The session objective was to provide an overview of regional, global, and national IHR core capacities. The session also provided an update on the implementation of IHR and APSED activities at both the regional and global levels, as well as an update on recent global-level public health events.

3.1 Regional update: events and IHR implementation

Dr Rajesh Bhatia (Director, Department of Communicable Diseases (CDS), WHO Regional Office for South-East Asia)

In his presentation, Dr Bhatia said that the world has witnessed several major public health events since the beginning of the current millennium, bringing global health security to the forefront of agendas across various sectors and throughout the international community. As an important global instrument and through its optimal implementation, IHR is positioned to play a key role in ensuring global health security. With this in mind, he provided a summary of activities WHO had carried out in the past two years and also plans to undertake in the near future to support Member States with their IHR implementation plans, specifically in the context of global health security (A full list of forthcoming activities can be found in the conclusions and recommendations).

The WHO vision for global health security is a world safe from important infectious and non-infectious health security-related risks, hazards, and emergencies. This can be achieved through an adequate level of readiness, which would make it possible to mitigate political, technical, economic, operational, and managerial challenges. WHO and several other agencies, players, and countries are prioritizing global health security and are willing to support national efforts with this aspect of global health spending.

There are several initiatives related to global health security. In early 2014, the United States Global Health Security Agenda¹ was launched and is considered to be one of the most important global health initiatives introduced in the recent past. In part, this is due to political commitment from the highest level of the government and the inclusion of both a technical agenda and financial component. It is limited, however, to the infectious disease area of global health security. Other initiatives include the G8 Global Health Security, the Global Health Security initiative (primarily dedicated to bioterrorism, in the wake of the 11 September 2001 terrorist attacks), in addition to regional initiatives.

Currently, three protracted infectious disease events are being monitored globally and testing the IHR: the Ebola outbreak in West Africa, avian influenza A (H7N9) primarily in the People's Republic of China, and MERS-CoV primarily in the Middle East. With an increase in exported cases, it is clear that in a mobilized world, local transmission can quickly lead to a pandemic. Although the emergence of new pathogens cannot be fully controlled, it is necessary to be prepared to combat, mitigate, and control major public health threats. The world cannot afford to experience another influenza pandemic and the potential impact of a resistant influenza strain could cause millions of deaths and trillions of dollars of loss to the global economy. Preparing for and combating global health threats is not the sole responsibility of the health sector; multisectoral collaboration is essential. Several practical frameworks exist, through which sectors must operate to build the capacity for response. There are several existing WHO frameworks in the South-East Asia Region, including the APSED, the IHR, the Asia Pacific Strategy for Strengthening Laboratory Services, and others.

3.2 Global update on IHR implementation

Dr Florence Fuchs, (Coordinator, Global Capacity, Alert and Response, Department (GCR), WHO Headquarters)

Dr Fuchs presented a global update on IHR capacity building, feedback from the Sixty-seventh World Health Assembly, moving towards cross-sectoral collaboration and governance at the human–animal interface, and an update on the certification of points of entry.

¹<http://www.globalhealth.gov/global-health-topics/global-health-security/ghsagenda.html>

Several online resources are available for monitoring IHR implementation and since 2010, progress has been seen with their utilization, as 81% of Member States recently submitted the self-reporting IHR questionnaire to WHO. Results indicate that significant gaps remain in the areas of preparedness, human resources, points of entry, and chemical and radionuclear events. It was noted that the South-East Asia Region performs above the global average in some areas (including national legislation, zoonotic events, and food safety), and for this it was commended.

WHO recently launched the IHE webpage on Global Health Observatory², an interactive online platform for sharing programmatic data and statistics. The web-based repository provides thematic information on global situations and highlights trends using core indicators, database views, major publications, and links to relevant web pages. From this platform, it is possible to access published reports, run queries, and visualize data by country or region — including data related to the IHR Monitoring Framework.

The IHR was an agenda item at the Sixty-seventh World Health Assembly in May 2014, during which five countries from the South-East Asia Region made interventions (Democratic People’s Republic of Korea, India, Indonesia, Maldives, and Thailand). Countries committed to continue developing and maintaining their capacities, calling upon additional support from WHO while expressing overall appreciation for the support received to date. They highlighted achievements as well as remaining gaps, specifically emphasizing the need for stronger multisectoral collaboration and improved synergies, most often involving points of entry. WHO recognizes the need to reconvene the IHR Review Committee and advise the WHO Director-General to grant the second extension for the IHR core capacities through 2016. The Secretariat also recognizes the need to follow up on World Health Assembly resolution WHA65.23, which calls for a mechanism to maintain the core public health capacities required under the IHR. Member States were encouraged to provide suggestions and opinions regarding their vision for the framework post-2016. It was noted that some countries have begun discussions to identify a mechanism. A

²<http://www.who.int/gho>

wide consultative process has begun, involving the respective regions, and States Parties' views are welcome.

Through the tripartite agreement with the World Organization for Animal Health (OIE) and the Food and Agricultural Office of the United Nations (FAO), WHO is working to identify synergies and reduce duplicated efforts and a silo approach in ministries. To date, the organizations have collaborated to improve the IHR assessment tool, the IHR costing tool prototype, and laboratory assessment tool to better align the human and animal sectors.

Participants were informed that certification of ports and/or airports by WHO will not be mandatory. The countries may decide to apply for some of their ports or airport designated to develop core capacities for public health under the IHR. There is a draft document outlining the proposed procedure for evaluation. Countries may request WHO to evaluate for: routine capacities at all times and for public health emergencies. Several guidance documents concerning points of entry are available and can be easily translated and contextualized.

3.3 Global event detection and event management under the IHR

Dr Paul Cox, (Technical Officer (SHOC Management), Global Capacity, Alert and Response, Department (GCR), WHO-Head quarters)

Participants were briefed on the aims of global event detection under the IHR and the steps to determine if an event is a public health emergency of international concern (PHEIC). Global epidemic intelligence is a shared responsibility among actors and stakeholders at the country, regional, and international levels. The global distributed network of WHO offices work in collaboration with Member States, other United Nations agencies, technical institutions, nongovernmental organizations, WHO Collaborating Centres, and the private sector to ensure the international community receives timely and accurate information about public health events. Response is initiated early to minimize morbidity, and mortality due to emerging infectious diseases, and impose any unnecessary travel or trade restrictions. In addition to detecting and responding to new events, events still in

progress are continually monitored and assessed. Information about identified events is stored and shared internally via the Event Management System and communicated externally through different channels, including public sites, the Event Information Site for national IHR focal points, and the Global Outbreak and Response Network (GOARN) — a technical partnership that pools human and technical resources for detection and response to disease outbreaks of international importance.

An overview of data from the Event Management System was presented, with a global summary of all-hazards public health events since 2000. It was noted that between 2000 and 2008, the primary source of initial event information was the media and all available information, including unofficial sources, was used for the early identification and assessment of public health risks. However, since 2009, national IHR focal points and national governments have become the main source of event reporting, suggesting improved governmental core capacities.

4. Presentations on national IHR core capacities and implementation plans

The session objective was for countries to share their respective IHR implementation plans, challenges, and next steps.

As demonstrated through their individual presentations, the 11 Member States of the South-East Asia Region have made measurable progress over the past five years in implementing the IHR core capacities. All countries have developed mechanisms for coordinated implementation and monitoring and evaluation of the IHR. Extension plans were submitted by eight countries. Several countries shared similar needs in areas to be developed, namely: preparedness, laboratory, human resources, points of entry, chemical and radionuclear hazards, food safety, and risk communication. Many of the barriers and constraints identified by countries included: lack of multisectoral coordination, insufficient funding, inadequate human resources and high personnel turnover, need for high-level advocacy for political support for the IHR, insufficient laboratory capacity, inadequate capacity to respond to food, chemical and radionuclear safety, risk communication, and the lack of public health risk assessments.

The suggested recommendations from countries included:

- cross-border (and intercountry) information-sharing initiatives for surveillance, contingency plans, and jointly designated points of entry;
- other cross-border issues such as health concerns of migrants should be addressed in a broader framework than IHR;
- coordinated chemical, radionuclear, and food safety preparedness and response; and
- a funding basket for implementing IHR — should be discussed at a higher level (e.g. ministries of finance or planning commissions).

5. Monitoring and evaluation

The session objective was to provide an update on monitoring and evaluation, costing, and resource mobilization.

5.1 Introduction to monitoring and evaluation

Mr Graham Rady, (Monitoring and Evaluation Consultant, Australia)

The presentation provided an overview of basic monitoring and evaluation principles, considerations when designing a monitoring and evaluation system, identifying stakeholders and information needed for the system, as well as considerations for successful implementation.

A monitoring and evaluation system promotes goal-and objective-setting, partner ownership, and strategic planning. It also meets two basic management needs: accountability and learning. Accountability can be enhanced by providing evidence that objectives are adequately and effectively achieved, priorities are known, agreed upon, and shared with stakeholders, and by identifying the purpose for which dedicated funds and resources have been used. Learning and continual improvement is facilitated by knowing what is working, what can be improved upon, and understanding the reasons why things may or may not be working to ensure evidence-based decision-making. In the context of the IHR and APSED, a

monitoring and evaluation system can support Member States in assessing their capacity building needs, gaps, progress, and lessons for improvement.

The basic principles outlined in the presentation encouraged participants to:

- work through and build upon existing Member State monitoring and evaluation systems to promote ownership and sustainability;
- be pragmatic about requirements and not overly ambitious with new monitoring and evaluation systems to promote feasibility;
- encourage sharing and openness of access to monitoring and evaluation information to promote transparency, trust, and learning;
- involve key stakeholders in planning and implementing systems to promote usefulness for all and commitment to act on lessons;
- be guided by both external accountability and internal learning needs; and
- be focused on promoting desirable change/results and ongoing improvement.

There were two considerations identified for monitoring and evaluating the IHR and APSED at the country level. First, the primary focus should be on assessing and enhancing capacity-building *outcomes*. It will be necessary to continually build capacity beyond 2016 — not only for developing nations, but for industrialized nations as well. Furthermore, there is a need to be pragmatic rather than idealistic in order to promote sustainability. It was also suggested that countries invest in an “early evaluation” to influence and inform planning for the forthcoming year. At the country level, it was suggested that the annual national work-plan review process can be strengthened by ensuring the IHR questionnaire is a strong multisectoral process supported by WHO, and the Technical Advisory Group formally reviews IHR progress, national plans, and implementation of recommendations.

At the regional level, it was suggested that the Technical Advisory Group’s monitoring and evaluation function can be enhanced by:

- reviewing relevance, effectiveness, implementation challenges, sustainability of institutional strengthening, and lessons learned leading to ongoing improvements;

- annually reviewing summarized IHR information for general trends;
- ensuring Member State participation to promote understanding and ownership; and
- continuing the involvement of monitoring and evaluation skills.

5.2 The APSED monitoring and evaluation guide and performance indicators

Dr Chin Kei Lee, (Team Leader, Emerging Disease Surveillance and Response, WHO Regional Office for the Western Pacific)

The presentation briefly outlined the eight focus areas of the APSED, highlighting the addition of monitoring and evaluation at both national and regional levels. A systematic approach was envisioned for monitoring and evaluating APSED, aiming to create a results-based framework with enhanced country-ownership, to strengthen linkages between country- and regional-level efforts, and to optimize country reporting requirements. Monitoring and evaluation harmonizes the country planning and review process with the regional planning and review process, and vice versa, to ensure regional and global health security. At the regional level, both country progress and regional progress will be monitored (via country work plans and the Technical Advisory Group/APSED Forum, via country planning and review meeting, and APSED Technical Advisory Group meeting, respectively).

The forthcoming monitoring and evaluation guide being prepared by WPRO outlines the integrated approach, calling for:

- monitoring and evaluation teams
- regular planning and review meetings
- national work-plans
- use of indicators (IHR and APSED)
- progress reports.

APSED performance indicators have been created to measure combined results of the capacity-building efforts for APSED focus areas, support and align them with the IHR core capacity requirements, and emphasize the importance of qualitative information or quality-related information — extremely useful to understand system performance and identify areas for improvement. A “programmatic” outbreak review would evaluate the overall performance of IHR/APSED capacity building, highlight successes and failures of the strategy, and guide planning. The current ideas about the approach and mechanism will be discussed at the 2014 APSED meeting in 2014 and, if endorsed, be presented at the 2015 meeting.

5.3 IHR costing tool

Dr Florence Fuchs, (Coordinator, Global Capacity, Alert and Response, WHO Headquarters)

Although considerable progress has been made in the development and strengthening of the required core capacities, many countries continue to face challenges in achieving full compliance. By utilizing existing data submitted by Member States through the IHR monitoring tool, extension plans and relevant assessment reports, WHO designed a costing tool to:

- provide countries with a standardized framework for estimating the costs of achieving and maintaining the minimum core capacities requirements; and
- generate estimates of resources needed to build and sustain the IHR core capacities using a generic costing model. The model can be applied at the country level, is adaptable to specific country contexts, and takes into consideration existing capacities.

The tool facilitates the identification of activities and tasks needed to meet the IHR requirement, categorized by the eight core capacities or the four core functions, and proposes a system for costing the associated inputs, using actual local costs. It includes start-up and operating costs of maintaining IHR-associated activities. The tool will also incorporate the country assessment of compliance with the requirements of the IHR, as well

as strategies and priorities defined in the national action plans or in the extension plans submitted to WHO.

An electronic version of the tool is currently in development. In the future, it can be used by Member States for effective planning, budgeting, and advocacy needs. It can also help ensure the inclusion of the identified costs within the regular funding framework of a country, particularly for recurrent costs needed to maintain the IHR capacities. It can also facilitate the consideration of the IHR-associated requirements within routine activities of public health authorities. In addition, the costing tool is expected to be useful for addressing the gaps identified by the national action plans and assisting in the budgetary planning of the associated costs. The goal is to ultimately strengthen the national health system, of which the IHR core capacity development is an integral part.

The presentation concluded with a visual of the costing tool's data entry screen, including input fields. The tool is Excel-based and will be pilot tested at the regional level, after which country dissemination roll-out strategies will be planned. It is anticipated that the tool will be ready for use by the end of 2014 or early 2015.

5.4 Resource mobilization: how to develop a proposal

*Ms Paola Caruso (Technical Officer-External Relations,
WHO Regional Office for South-East Asia)*

Despite improvements in global health outcomes, a number of current challenges continue to require dedicated resources: child and maternal health, climate change, urbanization, an ageing population, noncommunicable diseases, and unfinished business in infectious disease.

Although variations among countries in the Region exist, there are a number of shared priorities, challenges, and gaps regarding health programming and financing. As indicated by survey results from the 11 South-East Asia Region country offices, current challenges identified include communicable diseases, noncommunicable diseases, promoting health through the life course, health systems, and preparedness, surveillance, and response. Three of these areas are critically underfunded:

noncommunicable diseases, health systems, and preparedness and response (including hospital infection and control). Since very few donors are willing to fund these areas, it is necessary to provide evidence to demonstrate that these areas must not be overlooked. In the next biennium, three countries anticipate a reduction in donor funding, while six anticipate no change in their funding levels. When asked to identify two funding priorities, nine countries indicated health systems, eight indicated noncommunicable diseases, and three indicated health through the life course. It was noted that no country responded with communicable diseases as a funding priority. This could be because outbreaks and natural disasters are very unpredictable and thus raise a question with donors as to why support something that may never happen. But the consequences of not preparing may be huge: for example the economic impact of SARS, MERS or the currently Ebola outbreak. The presentation proceeded to suggest specific steps for proposal development when approaching donors for additional funds and when identifying new potential donors.

6. Implementing IHR core capacities for chemical and radionuclear events: all-hazards preparedness and response

The objective of the session was to share experiences for the detection and response to chemical and radiation events: all-hazards preparedness and response.

6.1 Strengthening chemical events preparedness and response

Ms Lesley Onyon (RA-OHC, WHO Regional Office for South-East Asia)

The presentation highlighted the reasons which make the area of chemicals particularly challenging, specifically related to IHR core capacity implementation. It also touched upon the types of chemical events found in the Region, as well as the regional self-assessment of core capacities. The presentation provided an overview of some of the international instruments and initiatives related to chemicals, including current WHO initiatives for capacity strengthening. WHO views chemical safety as a cross-cutting issue,

involving several programmatic areas, including: occupational health, water, sanitation and health, environmental health and climate change, food safety, International Health Regulations, emergency and humanitarian action, and noncommunicable diseases.

According to the International Red Cross, there were nearly 7300 disasters worldwide between 2003 and 2013, and from the events reported to WHO, 76 were chemical hazards. Six of these events occurred in the South-East Asia Region. The chemical industry is one of the world's largest with production expanding more quickly in developing countries, linked to economic development. An estimated 84 000 different chemicals are in use globally, subject to various regulatory controls during their production, use and disposal. Capacity gaps are apparent at national, regional, and international levels — not always aligning across sectors. Regulations for controlling chemicals most often exist outside the health sector. The health sector's role in chemical safety requires strengthening, and not only within the context of the IHR.

Three regional priorities were identified, namely the need to: continue to understand and strengthen the evidence for action to improve sound chemicals management; enhance the role of the health sector in the sound management of chemicals by identifying a focal point for chemical safety within health ministries; and accelerate the implementation of regional and international chemical priorities. Currently, WHO provides capacity-building in the area of chemicals by supporting the establishment and strengthening of poisons centres, building networks and partnerships at regional and international levels, and through guidance material, tools, and training. At the country level, Member States must ensure that their public health systems can detect and respond to chemical events. Since the detection and response to chemicals exposure is part of a poison centre's core work, it is necessary to strengthen their links with public health authorities, including the national IHR focal point. In addition, clinical toxicologists can assist in outbreak investigations.

Since the need to strengthen chemicals management capacity is an issue that extends beyond the IHR, it is essential to link with existing health sector and non-health sector initiatives. As IHR capacities vary from country to country, there is scope for multicountry and regional initiatives. WHO has a range of technical assistance tools support and is engaged and

strategically positioned at an international level to advocate for IHR implementation. Opportunities for resource mobilization may exist with other chemicals initiatives, particularly where common needs are identified.

6.2 Poison centres and their role in chemical events preparedness and response

Dr Thanjira Jirantakan (Clinical Instructor, Division of Toxicology and Occupational Medicine, Bangkok, Thailand)

There are poison centres in six countries in South-East Asia but with considerable variation among them and their respective capacities, services, and operational partners. The presentation outlined how well-equipped poison centres can provide valuable resources for each core capacity of the IHR. Effective collaboration and communication between poison centres and national IHR focal points can enhance IHR implementation. It was also emphasized that there is a need to strengthen poison centre networks both nationally and internationally.

Dr Jirantakan proceeded to outline the numerous roles and activities of poison centres in Thailand. There are 14 medical toxicologists in the country, and the centres offer a range of services, including information and free clinical consultations, conducted by medical toxicologists and specialists in poison information, available 24 hours a day. Toxicology laboratories provide expert chemical analysis and both national and international specimens are accepted, although some cross-border issues exist with international samples. The centres are regularly called upon for risk assessments, disease surveillance, and outbreak investigations — a team of toxicologists and poison information specialists was deployed to Myanmar in 2008, as part of the Cyclone Nargis response efforts.

6.3 Strengthening synergies between international instruments

Dr Iygararasan Mylyakanam (Chemical Focal Point, United Nations Environment Programme, Regional Office for Asia and the Pacific)

In 1972, the first major global environmental meeting arranged by the United Nations was held in Stockholm. One of the results of the conference

was the creation of the United Nations Environment Programme (UNEP), mandated to act as the leading global environmental authority and advocate. The organization has six offices in their Asia-Pacific Region, including a Regional Office in Bangkok. UNEP has recently been strengthened and upgraded and the first UN Environment Assembly was held during 23–27 June 2014.

The presentation outlined four existing multilateral environmental agreements. The Basel Convention regulates transboundary movements of hazardous wastes and their disposal. The Rotterdam Convention defines prior informed consent procedures for certain hazardous chemicals and pesticides in international trade. The Stockholm Convention requires its Parties to take measures to eliminate or reduce the release of persistent organic pollutants into the environment (UNEP is currently collaborating with WHO to implement a persistent organic pollutants monitoring programme). The Minamata Convention regulates the use of mercury. A joint secretariat exists for the Basel, Rotterdam, and Stockholm Conventions, but since the Minamata Convention is relatively new, the secretariat is seeking cooperation with the other conventions and other international bodies. Information on all multilateral environment agreements can be accessed through the online portal InforMEA³. In addition, the Strategic Approach to International Chemical Management (SAICM) is a policy framework to promote chemical safety around the world. Through SAICM, there are synergistic opportunities between the health and environment sectors to achieve targets for the 2020 World Summit on Sustainable Development goal of sound chemicals management. Together with WHO and other international partners, UNEP and WHO provide the joint secretary of the part of the Regional Forum on Environment and Health for South-East and East Asia.

6.4 REMPAN — role and function

Dr Susilo Widodo

(Head of Centre for Science and Accelerator Technology (PSTA))

Following the Chernobyl accident of 1986, two international conventions established the framework for a systematic response to radiological and

³<http://www.informe.org>

nuclear emergencies under the leadership of the International Atomic Energy Agency (IAEA) and other organizations. The Convention on Early Notification of a Nuclear Accident aims to provide timely notification to IAEA by Member States in the event of a radionuclear accident. The Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency serves as a legal framework to facilitate prompt assistance. In order to fulfil its obligations under the two conventions, WHO acceded to both treaties and established the Radiation Emergency Medical Preparedness Assistance Network (REMPAN) in 1987. Together with the IHR and World Health Assembly resolutions, the two legal frameworks specify the role of WHO in global preparedness and response to radionuclear emergencies. The conventions are implemented through the Joint Radiation Emergency Management Plan of the International Organizations and the Interagency Committee for Radiological and Nuclear Emergencies, of which WHO is a member. Under the Joint Radiation Emergency Management Plan of the International Organizations, WHO is responsible for: public health risk assessment and response, biological and clinical dosimetry, emergency medical response (diagnosis and treatment), longer term follow-up, mitigation of mental health impact, and the control of food and feed.

Coordinated by WHO headquarters in Geneva, REMPAN now has over 40 members worldwide (15 officially designated REMPAN collaborating centres and 30 informal liaison institutions), including medical and research institutions specializing in radiation emergency medicine and other public health fields related to the complete radiation emergency management cycle (prevention, planning, response, and long-term follow-up). The network receives notifications of radiation accidents and provides technical advice and assistance, on request from an affected country, WHO, or via the IAEA. The coordination and planning meeting of WHO/REMPAN collaborating centres and liaison institutions is convened every three years — most recently held in May 2014. At this meeting, the WHO Regional Office for South-East Asia reported on the development of a strategic framework for IHR implementation regarding chemical radiation emergencies. The regional strategy was developed in consultation with technical experts and national authorities, requiring multisectoral collaboration with partner agencies. The Fourteenth Coordination and Planning Meeting also shared lessons learned from the Fukushima radionuclear accident of 2011. Meeting proceedings are published and

disseminated through the Journal of Radiation Protection Dosimetry. A REMPAN e-newsletter is also disseminated biannually.

6.5 Strengthening radionuclear preparedness and response and WHO strategy for chemical and radiation events in the context of IHR

Dr Richard Brown (Medical Officer, WHO Country Office for Thailand)

On behalf of Dr Zhanat Carr, WHO Headquarters, Dr Brown presented an overview of the Organization's role in strengthening radionuclear preparedness and response in Member States. Radionuclear emergency preparedness remains a high priority issue for IHR implementation in most WHO regions, as many countries try to reach full core capacity compliance.

WHO is committed to strengthening radionuclear event preparedness through several activities, including: promoting international standards and monitoring implementation to support the safe use of radiation, especially in the health sector; supporting harmonization of emergency response criteria and protocols; supporting national capacity building and IHR implementation; and providing technical tools, reports, and guidelines for health sector policy development. These tools include the guidelines on clinical management of acute radiation syndrome, and for a public health response to radiation emergencies, a risk communication tool on radioactivity and food safety, and reports on the 2011 Fukushima nuclear accident. WHO also engages expert networks such as REMPAN, BioDoseNet, and the International Food Safety Authorities Network (INFOSAN) for training, workshops, and conducting full-scale emergency exercises. It was emphasized that intersectoral collaboration is necessary for a coordinated response and access to technical expert networks is crucial for timely reaction and advice in an emergency.

The subsequent presentation outlined the South-East Asia Regional Strategy to Strengthen Public Health Response to Chemical and Radiation Events in the context of IHR. With increasing incidence, chemical and radionuclear events are considered a priority hazard to public health in the South-East Asia Region. The strategy was developed in 2013 following informal consultations and regional meetings on chemical and radio-

nuclear events and aims to fulfill IHR core capacity requirements within a defined timeline, focus on identified priorities, and build on existing capacities. The objectives of the strategy are to:

- define key strategic actions to strengthen policy, coordination and communication; event detection, verification, and risk assessment; preparedness and emergency response; and capacity-building;
- assist in the identification of stakeholders in emergency preparedness and response to chemical and radiation events; and
- provide guidance on development of national strategies including implementation, and monitoring and evaluation of implementation.

It was noted that it is not necessary for countries to develop all capacities, as opportunities exist to link with another country or with a WHO collaborating centre. Emphasis was placed on the mapping of existing conventions, policy, and capacity as an essential activity in order to avoid duplicate efforts and the creation of parallel structures. Although the strategy's target audience is the national IHR focal points in health ministries, the involvement or endorsement of other stakeholders is crucial for successful implementation.

An introduction to all-hazards preparedness was presented, defined as an approach to emergency management, based on the recognition that there are common elements in the management of responses to virtually all emergencies, and that by standardizing a management system to address the common elements, greater capacity is generated to address the unique characteristics of different events. All preparedness plans share a common approach (risk reduction, preparedness, response, and recovery) and similar basic components (event detection/early warning, risk assessment, response, a common command structure or emergency operation centre, and information management and communications). By standardizing the planning and execution of a plan across all hazards, efficiencies are gained and efforts are streamlined. With an all-hazards approach, a greater pool of technical experts exists to provide support — a particularly valuable resource in complex emergencies.

The following steps need to be undertaken prior to adopting such an approach:

- identify and engage stakeholders (possibly establish intersectoral steering committee and working group);
- map and assess risks;
- map resources, including existing plans;
- initiate planning process;
- build on existing capacities, using a health systems approach;
- consider making an emergency operation centre the focal point;
- deliver training as needed; and
- test and retest, revise, and update the plan over time.

6.6 Global perspective on public health emergency management

Dr Paul Cox (Technical Officer (SHOC Management), Global Capacity, WHO Headquarters)

Public health emergency operation centres (EOC) play critical roles in the preparedness and response to public health emergencies. Despite the increased attention, demand, and need for EOC, no standards existed for their assessment and use. In order to ensure that all public health EOC have the capacity to perform core supporting functions for effective responses to public health threats and emergencies, particularly those of international concern, a coordinated and collaborative approach was needed.

In late 2012, WHO held a consultation in Geneva on public health EOC collaboration and launched the Public Health Emergency Operation Centres Network (EOC-NET). The meeting brought together 38 stakeholders from nine State Parties, seven regional and international organizations, WHO headquarters and the six WHO regional offices to share experiences and lessons learned, and to launch the EOC-NET. Participants identified the major roles and challenges of public health EOCs, validated the need for EOC-related data and information standards,

and agreed on the EOC-NET objectives and key working areas⁴. Although working groups have been created, the network is in its early stages and will require training and exercise components, as well as additional evidence-based guidelines to establish standards.

6.7 Case studies on strengthening emergency operation centres in the Western Pacific Region

Dr Chin Kei Lee (Team Leader, Emerging Disease Surveillance and Response, World Health Organization, Regional Office for the Western Pacific)

Comprehensive plans and well-prepared systems can reduce the negative health, social, and economic impacts of public health emergencies. Lessons learned from previous events emphasize the importance of a common operational platform for information sharing and an effective coordinated response. Focus Area 6 of the APSED, Public Health Emergency Preparedness, outlines key components for effective public health emergency preparedness and response: public health emergency planning, national IHR focal point functions, points-of-entry preparedness, response logistics, clinical case management, and health-care facility preparedness and response. The APSED vision for public health emergency preparedness is one in which Member States in the Asia-Pacific will have overarching, flexible national public health emergency preparedness and response plans and command and control systems in place, supported by functional EOC, to effectively respond to all acute public health emergencies of national and international concern, including an influenza pandemic.

When establishing its EOC, the Regional Office for the Western Pacific Region envisioned a physical location for both daily activities and emergency operations; one that would be functional during normal times as well as emergencies. Since its inauguration in March 2013, EOC has served as a coordinating hub for global event monitoring (i.e. human infection with avian influenza A (H7N9) in China) and emergency response (i.e. typhoon Haiyan in the Philippines). It has also been utilized for

⁴ EOC-NET website: http://www.who.int/ihr/eoc_net and Consultation meeting report: http://apps.who.int/iris/bitstream/10665/85378/1/WHO_HSE_GCR_2013.4_eng.pdf?ua=1

preparedness planning and exercises, as well as to host meetings with key partners and world health leaders.

7. Group work outcomes and partner presentations

Group exercises discussed chemical and radionuclear capacity strengthening, monitoring and evaluation and performance indicators for IHR, and the costing of IHR implementation plans and resource mobilization. Partners also provided overviews of their support and commitments to IHR core capacities implementation.

7.1 Group 1: Strengthening chemical and radionuclear capacity through an all-hazards approach

Although all countries reported having national multisectoral emergency or disaster management plans and communicable disease preparedness plans, specific plans do not exist for either chemical or radionuclear events. Countries also reported the absence of notification standard operating procedures and a clear coordinating mechanism, in the case of an event. There is also limited human resource capacity as well as a lack of equipment needed for an adequate response.

Support needed by countries, as documented by the group:

- training and training material;
 - laboratory, radio, poison centre set-up, drills, etc.
- guidelines and standard operating procedures;
- network for detection, verification, response;
 - poison centres network
 - laboratory network
- equipment and resources;
 - equipment list for points-of-entry preparedness
 - lab equipment and resources

- mapping of hazard sources (UNEP can provide assistance);
- mapping of resources for managing a chemical or radionuclear event; and
- mapping of medicine stockpile needs and resources.

Recommendations as documented by the group:

- countries should have effectively functioning crosssectoral, all-hazards preparedness plans for detecting, assessing, notifying, and managing chemical and radiation events;
- national-level mandate to conduct mapping of hazards and resources;
- all-hazards approach for response planning;
- coordination with national disaster management committees; and
- EOCs are essential for an effective response for chemical and radio-nuclear emergencies.

Resources available:

- sharing of standard operating procedures and guidelines;
- WHO collaborating centres for training;
- poison centres for emergency response;
- Thailand: Training – Rapid response team, chemical and laboratory analysis, technical assistance for establishing a poison centre, poison centre to offer advice to other countries;
- tools:
 - Indonesia: RTC for radionuclear preparedness training (IAEA)
 - Thailand: Rapid response teams, WHO collaborating centres, poison control centres;
 - standard operating procedures.

7.2 Group 2: Monitoring and evaluation and performance indicators of IHR

Key issues identified by the group:

- The annual IHR questionnaire is well-structured, comprehensive and useful to identify gaps and assist planning.
- Value is in the process, not the actual indicator scores.
- Monitoring the progress with improving capacities is more important than ranking countries.
- It is a useful tool for promoting collaboration with stakeholders.
- The national focal point is a key in the process and turnover is a problem.
- WHO provides necessary support.
- Information-sharing is in place and the APSED meetings are very useful for Member States.

Recommendations as documented by the group:

- monitoring and evaluation team to review the quantitative and qualitative information needed;
- assess the system response by conducting programmatic outbreak review; and
- evaluate regional and bi-regional strategies with support from Member States.

7.3 Group 3: Costing of IHR implementation plan and resource mobilization

Key issues identified by the group:

- core capacities need to be strengthened at all levels;
- surveillance, laboratory capacity, chemical, radionuclear;
- multisectoral collaboration strengthening;

- human resource capacity strengthening;
- use the self-assessment tool to develop the action plan;
- national priority followed by IHR monitoring tool in developing implementation plan;
- usually five-year- plan but for extension, two-year action plan was submitted; and
- Thailand case study: three-pronged approach
 - used each capacity: set the budget for training, meetings (based on gap analysis);
 - budgeted in terms of hazards: emerging infectious disease, food safety (disaster management fund) and involved other ministries (national emerging infectious disease plan, national surveillance capacity development plan); and
 - functional approach: crisis or outbreak response (used emergency budget).

Recommendations as documented by the group:

To Member States:

- institutionalization of budgeting;
- institutionalization of capacity-building (nationals and networking);
- maintenance: Policy of turnover of staff from government (restriction of lateral transfer) retention strategy;
- integrated to health/country plan;
- consider core capacities and hazard approach for budgeting;
- risk management (analysis and mapping); and
- Report to regional committees on country's IHR implementation and sustainability.

To WHO:

- technical assistance identified (expert rosters, especially chemical and radionuclear);
- regional networks (facilitating the networks);
- support capacity-building;
- assessing and identifying the gaps; and
- advocate to other sectors (other ministries) about IHR and its core capacities.

7.4 Partner presentations

On behalf of the United States Department of Health and Human Services, Dr Matthew Johns outlined some of the regional activities supporting the IHR and a multifaceted approach to international public health preparedness and response. Participants were briefed on the cross-sectoral process for potential PHEIC event assessment and notification within the United States, the Global Health Security Agenda's intention to complement the IHR in collaboration with WHO and other actors including FAO and OIE, and priorities identified during a recent all-hazards workshop conducted in Thailand. The Department of Health and Human Services believes regional partnership opportunities exist and is interested in supporting priority areas, as defined by the Member States.

Dr James Heffelfinger from the United States Centers for Disease Control and Prevention (CDC) outlined the organization's role and commitment to the detection, prevention, and control of human disease. CDC is a domestic and international leader for ensuring IHR compliance and coordination for the United States and Member States. Since 2009, CDC has been a designated collaborating centre for the implementation of IHR core capacities. Participants were also briefed on the Global Health Security Agenda, including objectives, implementation activities, and direction for the 2014 fiscal year. CDC not only played a key role in the development of the Global Health Security Agenda and other related policy activities, but also leads its planning and implementation.

Dr Daniel Schar provided an overview of the United States Agency for International Development (USAID) regional investments supporting IHR, namely, the Emerging Pandemic Threats Programme which aims to aggressively pre-empt or combat diseases that could spark a future pandemic. In collaboration with WHO, FAO, and OIE, programme activities provide direct or indirect support for IHR core capacity-building. The current phase of the programme consists of four projects: Predict, Respond, Identify, and Prevent. Under phase I, activities were carried out in the Gangetic Plain, the Mekong Region, and other regional “hot spots” where new disease threats have previously emerged. With phase I of the programme ending its five-year cycle later this year, phase II will focus on three component projects: a continuation of Predict, One Health Workforce, and Preparedness and Response. USAID has additional investments in the South-East Asia Region that complement the IHR, demonstrating the agency’s strong commitment to building core capacities. USAID partners with CDC, the United States Department of Defense, Department of State, and Department of Health and Human Services to implement the Global Health Security Agenda.

On behalf of UNEP, Dr Iyngararasan Mylyakanam briefly reiterated key points from his presentation in an earlier session.

8. Emerging infectious diseases of public health concern and regional preparedness

Dr Paul Cox (Technical Officer (SHOC Management), Global Capacity, WHO Headquarters)

The objective of the session was to discuss current emerging infectious diseases of public health concern and regional preparedness.

8.1 Avian influenza A (H7N9): global update, national and regional preparedness

The presentation provided a brief update of the epidemiology of avian influenza A (H7N9), which has been an issue of concern since the spring of

2013 when the first cases were detected in China and reported to WHO. China quickly prioritized surveillance efforts, dedicating significant resources, resulting in transparent, swift, and accurate reporting. The Ministry of Family and Health Planning holds weekly situational updates and significant measures have been put in place to reduce poultry exposure, including the closure of live bird markets. It was noted that following the closure of such markets in Shanghai, there were no reported cases in the area between week 17 and week 50 of 2013. There have been fewer exported cases than originally anticipated, with only a few in Malaysia and possible cases in Canada. Case-fatality rate has dropped considerably, partially attributed to the increase in clinical case management training. Since infected poultry are asymptomatic, the virus is more difficult to observe than H5N1; despite this, the case-fatality rate is lower. Age distribution and gender ratio figures should be interpreted with caution, as specific cultural features are not necessarily represented. Testing for the virus in the animal sector has continued to be a challenge; it was mentioned that there is new literature addressing this. FAO and OIE have increased surveillance in migratory bird populations in high priority countries, namely Viet Nam and Myanmar.

In the discussion, Member States asked questions about the current recommendations and whether trade restrictions for chicken, eggs, and meat were warranted. Although H7N9 is a new virus, there are no new recommendations for preparedness or the management of newly identified cases. Despite China's implementation of internal trade restrictions between provinces, widespread restrictions have not been recommended, as they would result in enormous economic fallout.

8.2 MERS-CoV: global update and regional activity, national and regional preparedness

The MERS-CoV situation continues to unfold and despite a series of discussions, the IHR Emergency Committee has yet to declare it a PHEIC. As of 12 June 2014, there were 699 confirmed cases with several exported cases, more newly affected countries, and a significant case-fatality rate.

Despite the upsurge in MERS-CoV cases since March 2014, most have been nosocomial outbreaks, minor human to human community transmission has been reported, and there are a few zoonotic infections.

Case-fatality rates have decreased since February 2014, in part due to the implementation of clinical guidelines, better case definitions, and improved clinical treatment through WHO-supported clinical networks, training, and workshops. The overall number of cases is declining and the transmission pattern and profile of affected population have both remained unchanged. New research suggests that camels are a likely primary source of the virus. However, the mode of transmission from camels to humans and necessary actions to reduce transmission remain unknown. Since May 2014, there have been four newly affected-countries (Algeria, Iran, Lebanon, and the Netherlands), with most cases reported in pilgrims returning after performing *Umrah*. It was noted that these exported cases were likely related to activities surrounding *Umrah* rather than *Umrah* itself. There are infection and prevention control concerns involving religious mass gatherings (i.e. *Hajj*, *Ramadan*, *Umrah*), as exported cases could potentially seed outbreaks in other countries. Member States were encouraged to work with religious leaders to ensure that medical staff accompanying pilgrims have accurate and up-to-date information about the virus.

WHO has taken several actions following the most recent Emergency Committee meeting, including: infection prevention and control; critical investigation; case and contact identification and management; mass gathering travel advice; awareness and risk communication; and country support, coordination, and information sharing. New laboratory guidelines are forthcoming, along with updated testing protocols.

9. Discussion: moving forward beyond the current duration of APSED in the context of IHR

Dr Rajesh Bhatia (Director) and Dr Bardan Rana (Medical Officer (IHR), Disease Surveillance and Epidemiology (DSE), Department of Communicable Diseases, WHO Regional Office for South-East Asia)

Dr Bhatia requested Member States to voice their respective expectations of the APSED beyond 2016.

Dr Akarasewi stated that support would be needed for Focus Area 8, monitoring and evaluation, and expressed the desire for process guidelines to work together with other countries to identify shared gaps over time. Dr

Akarasewi also reiterated the need for support to strengthen radio-nuclear event preparedness and response. Dr Aroona expressed the need for a framework to maintain achievements in core capacities.

Dr Rana stated that monitoring and evaluation guidelines for the APSED are forthcoming and will be disseminated. Mr Rady contributed by emphasizing that monitoring and evaluation systems are essential to provide evidence for managers, external funders, and other decision-makers.

Participants expressed their desire for an all-hazards approach to be inclusive of natural disasters and the need to strengthen poison centre networks and intercountry collaboration to share technical lessons learnt. Dr Rana stated that the collective suggestions will be presented at the 2015 bi-regional APSED meeting in the Western Pacific Region.

10. Conclusions and recommendations

Considerable progress has been made by all Member States in the past year to improve their IHR core capacities and focus areas of the APSED. The results of the IHR core capacity self-monitoring reports show that a substantial amount of work, especially in the areas of chemical, radio-nuclear, points-of-entry, human resources, and preparedness, still needs to be undertaken in many countries. Nine of the 11 Member States in the South-East Asia Region requested an extension of the IHR core capacities implementation deadline until June 2016. Eight of the Member States submitted requests to the WHO Director-General with revised IHR plans of action.

- (1) Member States agree that a robust arrangement for results-based monitoring and evaluation and estimation of the financial and technical resources required to implement the IHR/APSED is lacking in their IHR plan.
- (2) The 2013 IHR review indicated that the world is not well prepared to prevent and mitigate major public health events. It is increasingly evident that multisectoral collaboration is required to combat these threats and that the health sector should play a lead role in this. IHR is the critical global instrument which carries both a political and legal obligation to address these threats.

- (3) Establishing and strengthening core capacity on chemical and radionuclear hazards continues to be an important challenge in the Region. Besides the significant knowledge gaps observed in many Member States, there are national, regional, and global obligations outside of the health sector that require additional efforts to engage other relevant sectors.
- (4) Member States, in response to the prevailing threats, are strengthening:
 - national all-hazards preparedness and response plans;
 - human and animal health coordination mechanisms;
 - risk communication capacity to address emerging infectious diseases (e.g. MERS-CoV in pilgrims);
 - guidelines for infection, prevention and control (not specific to MERS-CoV or avian influenza A (H7N9), but standard and transmission-based);
 - National influenza centres operational in eight Member States, H5 Global Laboratory and regional influenza reference laboratories functional;
 - PCR diagnostic facilities in all Member States;
 - Rapid response team training in most countries (trained during the severe acute respiratory syndrome outbreak).
- (5) The following regional activities are proposed for 2014–2015, to support Member States to ensure the IHR/APSED core capacities and functions are achieved:
 - Bi-regional influenza meeting: Jakarta, 12–15 August 2014
 - Regional training on laboratory biosafety for emerging pathogens: Pune, August 2014
 - Regional training on case management of avian influenza A (H7N9): Jakarta, September 2014
 - Regional communication/media workshop: Kathmandu, October 2014
 - Regional training on risk assessment for acute public health events: December 2014

- Onsite training for shipping of infectious material per international regulations: Q4 of 2014
 - Regional training on chemical and radio-nuclear hazards: Q1 of 2015
 - Regional workshop on points-of-entry: Q1 of 2015
 - Regional training on infection prevention and control: Q4 of 2014
 - Study visits and training on laboratory aspects to countries, on request
 - Bi-regional IHR/APSED meeting: WHO Regional Office for the Western Pacific, Manila, Q2 of 2015
- (6) It is evident that current resource constraints may prove to be a significant challenge to future IHR/APSED implementation. Developing and implementing an advocacy plan to promote resource mobilization is critical.

Recommendations

To Member States

- accelerate the development of all-hazards preparedness and response plans with the involvement of relevant sectors;
- consider how best to utilize the IHR costing tool to assist with national IHR planning, budgeting, and resource mobilization;
- document and assess the response to events/outbreaks and/or conduct exercises/simulations to test the functional aspect of the IHR;
- strengthen and establish poison centres and poison centre networks in order to support the implementation of IHR for chemical hazards;
- strengthen intercountry collaboration and regional, bi-regional, and global networking for implementation of IHR core capacities and document and share best practices in the context of IHR implementation; and

- continue to actively engage with various development partners/initiatives for strengthening IHR core capacities.

To WHO

- continue to advocate with Member States and partners to keep IHR high on public health agendas by using advocacy plans and materials;
- finalize and disseminate the costing tool and facilitate use of this tool;
- develop guidelines and tool for risk mapping and an all-hazards preparedness and response plan;
- finalize and disseminate the APSED/IHR monitoring and evaluation tool and facilitate institutionalization of its use in Member States;
- collate information to support evaluation of APSED as a means to strengthen the national capacities and explore its scope beyond 2016;
- continue to support the establishment and strengthening of Emergency Operation Centres in Member States;
- support and facilitate the strengthening and establishment of poison centre and poison centre networks in order to support the implementation of IHR for chemical hazards;
- work with partners to mobilize technical and financial resources to support national IHR core capacity implementation;
- advocate for more formal harmonization of intercountry collaboration for implementation of IHR core capacities. For example, development of common standard operating procedures at points-of-entry;
- support Member States to implement the South-East Asia Strategy to Strengthen Public Health Response to Chemical and Radio-nuclear Events in the context of IHR; and
- explore opportunities with regional forums on harmonization of intercountry collaboration.

Annex 1

Agenda

- (1) Opening
- (2) Global and regional overviews of recent IHR events
- (3) Presentations on national IHR core capacities and implementation plans
- (4) Regional IHR core capacity situation analysis and implementation plan
- (5) Overview of 2013 regional meetings (and recommendations) on public health legislation, points of entry, zoonosis, chemical/radionuclear safety and APSED
- (6) Strengthening of IHR core capacity implementation, monitoring and evaluation of
- (7) IHR /APSED and the IHR costing tool
- (8) Resource mobilization for effective implementation of IHR
- (9) Group work on monitoring and evaluation, IHR core capacity costing, and resource mobilization
- (10) Way forward and recommendations
- (11) Closing session

Annex 2

List of participants

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The Regional Meeting on the International Health Regulations (IHR 2005) in the context of the Asia Pacific Strategy for Emerging Diseases, (APSED 2010) was held in Bangkok, Thailand from 24 to 26 June 2014 with the primary aim to accelerate establishment and consolidation of IHR (2005) core capacities and reviewing the progress in implementation of IHR core capacities in the South-East Asia Region along with strengthening the monitoring and evaluation of national IHR core capacity extension plans. In addition, discussion was held on current emerging infectious diseases, strengthening chemicals and radio-nuclear preparedness and response and global health security. As a result, priority activities to be carried out in the forthcoming year by both Member States and by WHO were identified.

IHR 2005 is an internationally-agreed instrument for global public health security that is legally binding for WHO Member States and provides collective defence against spread of diseases. The Asia–Pacific Strategy for Emerging Diseases serves as a framework to jointly help Member States of the South-East Asia and Western Pacific Regions of WHO to strengthen preparedness against emerging threats and thus meet the core capacity requirements of the IHR



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