The Asia Pacific Strategy for Emerging Diseases – a strategy for regional health security

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Health security in the Asia Pacific region is continuously threatened by emerging diseases and public health emergencies. In recent years, the region has been an epicentre for many emerging diseases, resulting in substantial negative impacts on health, social and economic development. As the region is home to more than 50% of the world population, true global public health security depends to a large degree upon how successful this region is in developing and sustaining functional national and regional systems and capacities for managing emerging diseases and acute public health events and emergencies.

Tremendous efforts have been made by individual countries and the international community to confront emerging disease threats in recent years, but the need for a common regional strategic framework has been recognized by countries and areas in the Asia Pacific region, the World Health Organization, donors and partner agencies. To address this need, an updated Asia Pacific Strategy for Emerging Diseases, or APSED (2010), has been developed, aiming to strategically build sustainable national and regional capacities and partnerships to ensure public health security through preparedness planning, prevention, early detection and rapid response to emerging diseases and other public health emergencies. The Strategy calls for collective responsibility and actions to address the shared regional health security threat with a greater emphasis on preparedness-driven investments in health security. APSED (2010) serves as a road map to guide all countries and areas in the region towards meeting their core capacity requirements under the International Health Regulations (2005) to ensure regional and global health security.

A CONTINUING THREAT TO HEALTH SECURITY

Emerging diseases pose a continuing threat to health security. In recent years, the Asia Pacific region has been an epicentre for many emerging diseases (including re-emerging and epidemic-prone diseases) resulting in substantial negative impacts on health, social and economic development. Some of these diseases are severe acute respiratory syndrome (SARS); avian influenza A(H5N1); dengue; Nipah and Hendra viral diseases; leptospirosis; hand, food and mouth disease; and pandemic influenza A(H1N1) 2009.[1–4]

Although it is impossible to predict what, where, when and how new infectious diseases will emerge, we can be confident that emerging diseases and public health emergencies will continue to occur.[5,6] Factors driving disease emergence may include microbial adaption and evolution, increased international travel and trade, rapid urbanization, population growth, changes in human demographics and behaviour, climate change, continuous degradation of ecosystems, breakdown of public health measures and deficiencies in public health infrastructure (including inadequate sanitation).[7–10]

NEED FOR A COMMON STRATEGIC FRAMEWORK

Attempts to develop a global strategy for confronting emerging infectious disease threats were made more than a decade ago.[11] However, due to significant emerging disease outbreaks in recent years, more serious efforts have been made by countries and the international community to confront these threats. Many countries have invested in enhancing their fundamental public health surveillance and response systems. Various new programmes, projects and networks related to emerging diseases have also been initiated with the involvement of national governments, international organizations, development agencies, donors and partners (including the private sector) and academic or educational

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institutions. These efforts have helped improve the overall preparedness for emerging diseases in the region and globally.[12]

The experiences and lessons learnt from implementation of the original Asia Pacific Strategy for Emerging Diseases, or APSED (2005), and pandemic (H1N1) 2009 showed a clear need for harmonization, prioritization, coordination, collaboration and efficiency in addressing the common threats. Such a collective approach required an up-to-date, agreed upon strategic framework that is relevant to all countries, regions and international stakeholders. The World Health Organization (WHO), as the directing and coordinating agency for international health within the United Nations system, has played an essential role in developing such global and regional public health policies and strategies in consultation and collaboration with countries and areas, technical experts and partners. Global and regional strategies can be tailored for national use based on country and area needs and context.

WHO'S ROLE IN HEALTH SECURITY

WHO has the mandate to support countries and areas in strengthening national systems, to help develop capacity and to coordinate a global response to public health security threats, especially those of international concern. The substantially revised International Health Regulations, or IHR (2005), serve as a legal instrument to ensure global health security through a collective approach.[13] Global health security depends on all countries being well equipped to detect, assess, report and respond to any public health events that threaten health security. As infectious diseases do not respect national borders, there is recognition that no single country alone – no matter how capable, wealthy or technologically advanced – can prevent, detect and respond to all acute public health threats. Effective regional and international surveillance and response systems are vitally important to ensure health security for all. Within this collective defence system for health security, WHO has several comparative advantages, including its ability and mechanisms to work with countries and areas to develop health policies, strategies and standards and to connect global experts and technical resources through networks such as the National IHR Focal Points, the WHO Collaborating Centres, the Global Outbreak Alert and Response Network (GOARN) and the Global Influenza Surveillance Network.

STRATEGIC APPROACH AND PRIORITIES FOR REGIONAL ACTION

The Asia Pacific region is home to more than 50% of the world population, thus true global public health security depends to a large degree upon how successful the region is in building, strengthening and sustaining functional national and regional systems and capacities for managing all emerging diseases and acute public health events and emergencies.

In September 2005, for the first time, the Asia Pacific Strategy for Emerging Diseases, or APSED (2005), was developed to provide a common framework for the 48 countries and areas of the Asia Pacific region.[14] This strategy aims to strengthen national systems and capacities for combating emerging diseases. It is a three-in-one strategy to help countries: (1) strengthen the generic capacities for managing emerging diseases, (2) improve pandemic readiness, and (3) build up to meet the IHR core capacity requirements for surveillance and response. APSED (2005) identified five programme areas as priorities for national capacity-building, namely surveillance and response, laboratory, zoonoses, infection control and risk communication. Through the collective efforts of countries and areas, WHO and partners, considerable progress has been made in all five APSED (2005) capacity areas. For example, most countries have now established event-based surveillance systems to detect public health events including disease outbreaks. Trained rapid response teams (RRTs) are able to conduct field investigations quickly. The capacities of the national influenza centres have been significantly improved. These capacities were tested through a real-world global public health event – Pandemic (H1N1) 2009. The pandemic response clearly demonstrated the value of regional investment in capacity-building.[15]

The 2005 Strategy has been recently revised in response to requests from countries and areas following recent developments and evolving needs. The updated Strategy, now called the Asia Pacific Strategy for Emerging Diseases (2010), also known as APSED (2010), was endorsed at the sixty-first Session of the Regional Committee for the Western Pacific in October 2010.[16] It builds on the experiences and accomplishments gained from implementing APSED (2005) and takes into account the key lessons learnt from the pandemic response, the needs expressed by countries and areas and the technical advice provided by experts during the intensive country and regional-level consultations

between July 2009 and October 2010. **Table 1** shows the similarities and differences between APSED (2005) and APSED (2010).

APSED (2010) aims to build sustainable national and regional capacities and partnerships to ensure public health security through preparedness planning, prevention, early detection and rapid response to emerging diseases and other public health emergencies. It calls for collective responsibilities and actions of countries and areas, WHO and partners to ensure a safer and more secure Region.

The 2010 Strategy has identified eight focus areas for prioritized technical and financial investment over the coming five or more years. These include: (1) surveillance, risk assessment and response; (2) laboratories; (3) zoonoses; (4) infection prevention and control; (5) risk communications; (6) public health emergency preparedness; (7) regional preparedness, alert and response; and (8) monitoring and evaluation.

The 2010 Strategy serves as a road map to guide all countries and areas in the region towards meeting their IHR core capacity requirements for ensuring regional and

Table 1. **Similarities and differences between APSED (2005) and APSED (2010)**

Area	APSED (2005)	APSED (2010)
Vision and goal	• Focus on addressing urgent need for managing emerging infectious diseases.	• Emphasis on collective responsibility for regional health security through addressing both emerging diseases and other acute public health emergencies.
Objectives	• Five interlinked objectives: → risk reduction → early detection → rapid response → effective preparedness → partnerships	• Five interlinked objectives: → risk reduction → early detection → rapid response → effective preparedness → partnerships
Focus areas	• Five programme areas: → surveillance and response → laboratory → zoonoses → infection control → risk communications	• Eight focus areas (original 5 + 3 new focus areas): → public health emergency preparedness (national) → regional preparedness, alert and response → monitoring and evaluation
Scope	• Emerging infectious diseases	• Emerging infectious diseases and beyond
Time frame	• 2006–2010	• 2011–2015
Process of development	• A top-down approach with various assessments and evaluations in supporting implementation and builiding on lessons from SARS.	• A bottom-up approach with intensive national and regional consultations and building on lessons from the influenza A(H1N1) 2009 pandemic.
Approach for implementation	• A step-by-step approach to ensure the minimum capacity components are in place. • A standard approach (less flexibility in implementing activities). • Focus on more resource-limited countries.	• Defining a clear vision for each focus area and stages towards the vision. • A non-standard approach (more flexibility in designing and implementing activities). • Continuing efforts for resource-limited countries, but also full participation of all countries and areas.

global health security. It endorses a common approach to surveillance, risk assessment and response for emerging diseases and related programmes such as food safety and health emergency preparedness and response.

CONCLUSIONS

Health security is a real and shared challenge requiring shared responsibility and collective actions. The anticipated benefits of APSED (2010) will be fully realized only if there is effective and coordinated implementation at both national and regional levels.

Conflict of interest:

None declared.

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