Health Security and Emergencies

Introduction

Preparedness for health security threats and the assessment and management of health emergencies are high priorities in the Western Pacific Region. The Division of Health Security and Emergencies (DSE) spent the past year working with Member States to set strategic directions for health security work in the Region. Major accomplishments included: development and endorsement of the Western Pacific Regional Food Safety Strategy (2011–2015); development of a five-year workplan to implement the updated Asia Pacific Strategy for Emerging Diseases, or APSED (2010); and formulation of an operational framework for coordinating health sector responses to disasters and emergencies through the newly established Regional Health Cluster Forum on Humanitarian Emergencies. Response capacity remains a key component of all of these initiatives, but a shift in emphasis towards preparedness has taken place.

With these initiatives in mind—as well as the International Health Regulations (2005), World Health Assembly resolutions and guidance from Member States—activities have been undertaken to strengthen the Region’s emergency response operations system, further develop national food control systems, and enhance national and regional public health event detection and assessment capacity.

A common regional operational platform for emergency response has been further strengthened within the Division. Building on lessons learnt from the March 2011 Japan earthquake and tsunami and other public health security events, the functions of the Regional Emergency Operations Centre are being further enhanced to improve response. Meanwhile, a number of countries are in the process of establishing and strengthening their emergency operations centres. The regional Emergency Operations Centre serves as a key management and coordination hub for health emergency response. The centre facilitates information collection and display, joint risk assessments, and timely decision-making and response.

Continuing technical support has been made available to several countries and areas in the Region to strengthen their national and local capacities for the prevention, detection and management of public health threats arising from emerging infectious diseases, food safety hazards, disasters and emergencies. The regional alert and response system, with participation of Member States and partners of the Global Outbreak Alert and Response Network (GOARN), continues to function well.

Western Pacific Surveillance and Response, a journal published by the Regional Office since 2010, serves as a capacity-building tool and an information-sharing mechanism for public health action. The journal has addressed a wide range of health issues, including regional dengue surveillance and disease outbreak response.

The Division’s three technical units made great strides over the past year. The Emerging Disease Surveillance and Response unit worked with Member States, the Asia Pacific Technical Advisory Group (TAG) and donors and partners to develop a five-year workplan for APSED (2010). The workplan covers all key technical focus areas, including surveillance, risk assessment and response, laboratories, zoonoses, infection prevention and control, risk communication, public health emergency preparedness, regional alert and preparedness, and monitoring and evaluation. It serves as a template to facilitate collective implementation of common activities that contribute to regional health security. APSED (2010) also serves as a road map for IHR (2005) implementation in the Western Pacific Region.
The Food Safety unit worked with Member States to develop and implement the *Western Pacific Regional Food Safety Strategy (2011–2015)*. Endorsed by the Regional Committee for the Western Pacific in October 2011, the strategy focuses on strengthening national food control systems in a variety of areas, including better food control and coordination throughout the food chain, improved availability of food safety data, up-to-date food safety training and education, and enhanced detection and management of food safety incidents and emergencies.

The Emergency and Humanitarian Action unit has reviewed lessons learnt from recent disaster responses and identified strategic directions in strengthening health emergency risk management. As the lead agency, WHO works with health partners through the Regional Health Cluster Forum on Humanitarian Emergencies to operationalize the health cluster response at the country level. The *WHO Emergency Response Framework* is being implemented to strengthen the Organization’s readiness in supporting the health sector response to emergencies and disasters.

Strengthening health service preparedness has been a priority for disaster risk management over the past year. The Division will continue to enhance a common operational platform for emergency response, building on the lessons learnt from the response to the Japan earthquake and tsunami.

In line with recent strategies and initiatives, the Division also will continue to emphasize preparedness, collaborating with all technical units and with Member States to further strengthen event-based surveillance, risk assessments and health emergency communications.
Gender and Disease Surveillance

Just like getting to know a person, understanding disease patterns also entails collecting basic information—such as sex and age.

When a dengue epidemic struck the Lao People’s Democratic Republic in 2010, the sex and age of victims was not readily available, making it difficult to understand the disease pattern. Thus, the Emerging Disease Surveillance and Response (ESR) unit sent a team to work with the Lao country office to collect data and assess the situation, leading to crucial findings on gender that provide lessons for better-informed public health responses.

Dengue patterns were found to be very similar to other dengue-burdened countries in the Western Pacific Region: most affected were males, in particular adolescent boys and young men. The team considered two possible explanations for the difference in cases reported among males and females: one, that boys and men tend to spend more time outdoors with more exposure to mosquitoes; and two, that men may have better access to health services because they often control how money is spent.

The WHO team went into the field in Savannakhet province to look for the answer. Interviews with villagers, school teachers and health-care workers revealed that adolescent boys and young men spend long hours outdoors. When they get sick, they tend to “tough it out” and not go to hospitals, or self-treat at pharmacies. However, young women, especially those of child-bearing age, were more health conscious and much more likely to seek health care, even for less-serious conditions.

Assessment of sex distribution and gender norms at a Lao primary school.

These gender differences were consistent with data on health-seeking behaviour patterns: many more young women than young men sought care as outpatients for various infectious diseases.

But the patterns for dengue were different. Even though adolescent boys and young men generally seek health care less, they comprised the majority of dengue patients. The team’s findings provided crucial evidence that adolescent boys and young men, in particular, may be truly at higher risk for dengue.

To better understand gender’s role in disease, ESR continues to incorporate a gender perspective into its work, carefully interpreting surveillance data, conducting in-depth field investigations and providing feedback to public health workers and affected communities.
Emerging Disease Surveillance and Response

Strategic issues

The Western Pacific Region is at the epicentre of various health security risks, including infectious diseases with pandemic potential. If not managed correctly, these risks could have severe public health, social and economic consequences. To that end, WHO continually monitors these threats using a regional event-based surveillance system, which detected more than 300 public health events between July 2011 and June 2012. To help minimize the impact of disease outbreaks for people and communities, WHO and its Member States have worked to develop a regional framework to strengthen the Region’s core capacity for prevention measures and control interventions.

The newly updated *Asia Pacific Strategy for Emerging Diseases*, or APSED (2010), endorsed by the Regional Committee for the Western Pacific in October 2010, builds directly on the significant progress achieved under APSED (2005), as well as the lessons learnt in other pandemic preparedness and response efforts. It was developed via intensive consultations at the country and regional levels and serves as a common framework for national and regional capacity-building in both the South-East Asia and Western Pacific Regions. APSED (2010) addresses health security issues and consolidates the national core capacities required under the International Health Regulations, or IHR (2005), and those necessary for influenza pandemic preparedness.

IHR (2005) requires countries to meet core capacity requirements by June 2012, although extensions may be granted. While most Member States in the Western Pacific Region have made significant progress, the majority of resource-limited countries will need more time to meet the requirements. The national workplans developed under APSED (2010) serve as road maps for countries to meet their IHR (2005) requirements, to enable national capacity that exceeds international obligations, and ultimately to ensure public health security.

Action and results

This report covers the first year of APSED (2010) implementation. At the regional level, a series of consultations were organized to provide more concrete guidance and direction in each focus area. Many countries—including Cambodia, the Lao People’s Democratic Republic, Mongolia, the Philippines and several Pacific island countries—have developed their APSED (2010) national workplans.

The workplans were the first output of the national stakeholders’ planning and review working group and team, tasked with coordinating APSED (2010) implementation. A regular national planning and review process has been central to efforts to implement a new focus area—monitoring and evaluation, intended to ensure both country- and regional-level mechanisms for accountability and effective implementation. An assessment of IHR (2005) core capacities, conducted through the monitoring and evaluation system, resulted in most resource-limited Member States requesting an extension in meeting their IHR (2005) obligations.

The annual Technical Advisory Group (TAG) meetings—in which Member States, technical advisers and partners discuss APSED implementation and set collective priorities—also is a key mechanism for monitoring and evaluation under APSED (2010). In addition to the planned annual TAG meeting in July 2012 at the Regional Office, a meeting was held in the Pacific
in May 2012 to address the unique challenges for the Pacific island countries and areas.

**Surveillance, risk assessment and response.**
To ensure the collection of quality information for decision-making, steady progress has been made in building capacity for risk assessment. Field epidemiology training programmes were enhanced through continuing development of human and technical capacity to address the needs of the surveillance and response teams, especially for newly established teams in Cambodia, the Lao People’s Democratic Republic, Mongolia and Viet Nam.

**Laboratories.** Another key element to ensure the collection of quality information is the availability of laboratory diagnosis. In APSED (2010), public health diagnostic laboratories at both the national and subnational levels were identified as those that should undertake early detection of novel and known pathogens.

**Risk communication.** Member States developed both regional and national workplans for risk communication under APSED (2010) with a focus on ensuring that a functional mechanism for health emergency communications exists at the national level with strong links to relevant sectors.

**Public health emergency preparedness.** Under the APSED (2010) framework, public health emergency preparedness was strengthened with technical support for the establishment of national emergency operation centres. In December 2011, an annual scenario-based communications exercise, Exercise Crystal, was conducted for the National IHR Focal Points in the Western Pacific Region.

**Regional alert and response.** The Regional Office advocates for collective and coordinated actions from the local to regional levels on health issues of public concern. Regional information on
priority diseases—such as influenza, dengue, and hand, foot and mouth disease—is disseminated regularly to enhance surveillance and response activities. To that end, *Western Pacific Surveillance and Response*, a journal published by the Regional Office, was created to provide a platform for timely information sharing. Technical and logistic support was provided in response to outbreaks of dengue, cholera and leptospirosis in Cambodia, the Lao People’s Democratic Republic, the Philippines, Papua New Guinea and other Pacific island countries and areas.

**Future directions**

With a solid foundation and significant progress over the past few years, the Western Pacific Region has the knowledge and capacity to manage emerging disease outbreaks. APSED (2010) strives not only to support Member States in meeting their core capacity requirements under IHR (2005), but also to harness collective action towards the broader goal of public health security.

Health security is a vital development issue. However, health security events often only receive attention and funding when the threats and risks have already materialized, even though prevention and preparedness are much more cost-effective. WHO believes that APSED (2010) will help shift the focus from reactive to proactive approaches, emphasizing preparedness efforts to help better equip countries to respond without delay.

WHO will continue to work towards a more secure Western Pacific Region. By ensuring a robust monitoring and evaluation framework, implementation of APSED (2010) will be further improved to ensure sustainability and accountability, and to improve programmes at both national and regional levels.

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**Emergency and Humanitarian Action**

**Strategic issues**

The Western Pacific Region is prone to a wide range of emergencies and natural disasters affecting both developed and developing countries. In recent years, the Region has been hit with disasters of epic proportions—the earthquake in Wenchuan, China, in May 2008; the earthquake and tsunami on the eastern coast of Japan in March 2011; and typhoons and devastating floods in the Philippines in 2009 and 2011—all of which resulted in enormous loss of life and serious damage and destruction to health infrastructure and health systems.

At the sixty-second session of the Regional Committee for the Western Pacific in October 2011, Member States considered the lessons learnt from recent disasters, in particular, the February 2011 earthquake in Christchurch, New Zealand, and the March 2011 earthquake and tsunami in Japan. While progress was reported on improving national emergency and disaster risk management capacities throughout the Region, the Regional Committee noted three areas for renewed focus: overall emergency and disaster preparedness; post-disaster recovery and reconstruction; and strengthening disaster risk-reduction activities, in particular efforts to promote safe hospitals. As a result, WHO is enhancing efforts in strategic preparedness and emergency risk management while continuing to respond to events.

**Action and results**

A number of initiatives were launched during the past year to address strategic preparedness and emergency risk management.
The newly established Regional Health Cluster Forum on Humanitarian Emergencies convened in August 2011 and approved a simplified framework to facilitate regional preparedness for health cluster operations at the country level. The regional forum facilitated working relations and fostered partnerships among health partners in the Region.

In collaboration with Japan, WHO documented and disseminated additional lessons learnt from the ongoing recovery from the earthquake and tsunami. An informal consultation on health sector preparedness in response to emergencies and disasters, conducted in March 2012, was intended to improve common understanding of post-disaster health issues, including sexual and reproductive health needs, as well as to identify key actions to ensure health services can be provided at local level in the wake of disasters.

Promoting safe hospitals is vital to reduce risks from emergencies and disasters. An informal consultation on safe hospitals is planned for late 2012 to identify a clear vision and explore a possible long-term strategy and approach for ensuring sustainable hospital safety.

Even with the focus on strategic preparedness, strengthening capacity and response to acute emergencies and disasters remains important. Since July 2011, a number of significant emergencies and disasters occurred in the Region: typhoons and floods in Cambodia, the Lao People’s Democratic Republic, the Philippines and Viet Nam; floods in Fiji; droughts in Tokelau and Tuvalu; and a landside in Papua New Guinea. Tokelau and Tuvalu declared states of emergency due to droughts in January 2012, while Fiji declared a state of emergency in the aftermath of severe flooding in March 2012. WHO’s emergency response support over the past year focused on assisting Cambodia, Fiji, the Lao People’s Democratic Republic, the Philippines, Tokelau and Viet Nam following emergencies and disasters. Support included assessments of health needs and risks, injury management and patient care, health situation monitoring, post-disaster communicable disease prevention and control,
and disease and acute public health event surveillance and response, as well as support addressing special needs, such as reproductive health and psychosocial and mental health issues. Logistic support and rapid diagnostic kits were provided to some affected countries.

To improve readiness and provide timely support to Member States, WHO established an Emergency Response Framework that sets out common operational procedures at global, regional and country levels.

Future directions

WHO will work with Member States and partner agencies to strengthen emergency and disaster risk management capacities, including health emergency preparedness, response to and recovery from acute emergencies and disasters, and the promotion of safe hospitals.

Strengthening national and local preparedness for health sector response to emergencies and disasters will remain a priority. Collective efforts will be made to engage national focal points in ministries of health to identify common elements and appropriate approaches for effective health emergency preparedness at the country level.

As the lead agency for the United Nations health cluster, WHO will continue to promote the Regional Health Cluster Forum on Humanitarian Emergencies as a mechanism to bring health partners together. WHO will continue to implement the newly developed Emergency Response Framework through staff training, functional exercises and the application of acute emergency response procedures.

Promoting safe hospitals will remain a focus for disaster risk reduction efforts. A long-term strategy and sustainable approach will be developed in further consultation with Member States and technical experts.
Additionally, support was provided to Samoa to further develop food legislation. With the Codex Trust Fund and the Food and Agriculture Organization of the United Nations (FAO), support was provided for the national Codex teams of Samoa, Solomon Islands and Vanuatu to visit New Zealand to learn about the national Codex processes of Australia and New Zealand. Support from the Codex Trust Fund continues to assist a number of authorities in the Region to develop food control systems.

Pacific island countries and areas took part in a meeting of the FAO/WHO Pacific Food Safety and Quality Legislation Expert Group to discuss progress and share experiences in developing food legislation as well as to learn how to utilize risk-based approaches in national food control systems. Experts from Australia and New Zealand assisted with the meeting.

Improved availability of food safety data to better guide policy and risk analysis. Support was provided to Cambodia, the Lao People’s Democratic Republic and Viet Nam for laboratory capacity-building, foodborne disease outbreak investigation and laboratory needs assessment with funding from the United States Agency for International Development (USAID). Additional support on microbial risk assessment was provided in Fiji and Viet Nam. In Qingdao, China, foodborne disease surveillance and microbial and chemical risk assessment was supported. Using WHO collaborating centres throughout the Region, laboratory assistance was provided to a number of countries in response to foodborne disease outbreaks.

Food inspection. Food inspections are critical for effective food control systems. A review of the resources for training food inspectors was initiated across the Region with a goal of strengthening training modules. Several countries received support to further develop their risk-based food inspection services, and key food inspection equipment was provided to several countries. Officials from Papua New Guinea underwent audit training in Australia with assistance from the New South Wales Food Authority and WHO.

Food safety training and education. Food safety education for street food vendors in the Federated States of Micronesia and for vulnerable populations in China was provided using the WHO “Five Keys to Safer Food” message.

Food safety emergencies. Technical assistance was provided to several countries in the development of food safety emergency response plans. Assistance was provided to Solomon Islands to manage the food safety aspects at anticipated mass gatherings. Technical assistance was also provided to help manage food safety issues associated with flooding in Fiji.

Food safety cooperation. The inaugural meeting of the Food Safety Cooperation Working Group was held Canberra, Australia, in April 2012, with food safety officials from Asia Pacific Economic Cooperation, the Association of Southeast Asian Nations, FAO, the World Organisation for Animal Health and WHO comparing processes and programmes for food safety capacity-building. Discussions focused on ways to leverage resources and expertise, avoid duplication of efforts, and establish partnerships for specific projects.

Future directions

There is a need to develop a mechanism to assist in the implementation of the Strategy. There also will be a renewed concentration to ensure optimal collaboration with partners working with national governments.

The development of risk-based legislation and its effective implementation through strengthening of food inspection services will continue to be a priority for the coming year. Considering the noncommunicable disease crisis, WHO will continue to assist Pacific island countries in implementing combined measures to address foodborne disease and diet-related disease risk factors.