Second Meeting of Pacific National Focal Points for the International Health Regulations

Rarotonga, Cook Islands
14-16 October 2008

World Health Organization
Western Pacific Region

Meeting Report

Report series number: RS/2008/GE/47(COK) English only

REPORT

Second Meeting of the Pacific National Focal Points for the International Health Regulations

14–16 October 2008
Rarotonga, Cook Islands

Convened by:

WORLD HEALTH ORGANIZATION

Not for sale

Printed and distributed by:

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

February 2009

NOTE

The views expressed in the report are those of the participants in the Second Meeting of the Pacific National Focal Points for the International Health Regulations and do not necessarily reflect the policies of the Organization.

This report has been prepared by the World Health Organization Regional Office for the Western Pacific for governments of Member States and for those who participated in the Second Meeting of the Pacific National Focal Points for the International Health Regulations, held in Rarotonga, Cook Islands, 14–16 October 2008.

SUMMARY

The Second Meeting of Pacific National Focal Points for the International Health Regulations (IHR) (2005) reviewed progress made by Pacific island countries and areas (PICs) in the assessment of capacities and development and implementation of workplans to give effect to the core capacities under IHR (2005) and the Asia Pacific Strategy for Emerging Diseases (APSED). Thirty countries in the Asia Pacific Region, including all PICs, have conducted APSED capacity assessments. More than 20 countries, including 10 PICs, have developed detailed implementation plans based on these assessments. While considerable progress has been made in identifying and strengthening priority areas, several capacity gaps still need to be addressed before the Pacific region can have an adequate level of collective health security.

A specific requirement for implementation of IHR (2005) is the establishment of a functioning National IHR Focal Point (NFP). This national centre provides, on behalf of the Member State, a continuous communication channel with WHO, by collating and disseminating information throughout the health sector and other government agencies as required. Because of the situational overview needed to maintain this communication role, the NFP may be well placed to support national surveillance and response functions, as well as coordinating planning and providing leadership for other activities related to IHR (2005). While all PICs have designated NFPs, experience to date has shown that not all of them are accessible at all times. This suggests a need to further strengthen and maintain NFP capabilities. Additionally, many PICs do not have a pre-agreed process for activating and applying the Decision Instrument, as provided for in Annex 2 of IHR (2005), for the assessment of potentially serious public health events.

A variety of formal and informal mechanisms are available to PICs for sharing information in the Pacific and beyond. These mechanisms include: (1) use of regional networks such as Pacific Public Health Surveillance Network; (2) requests for technical advice to, and consultations with, WHO; and (3) following the application of the Decision Instrument, formal notifications to WHO of events that may constitute a potential public health emergency of international concern. Use of these mechanisms can assist with risk assessment and allow access to expertise to support investigation and response activities, even when no further international reporting is necessary.

Most outbreak or event-related public health functions rely, in the first instance, on surveillance. Surveillance can be defined as the systematic collection of useful data, the evaluation of these data, and the dissemination of the results to those who need to know. Surveillance serves a number of purposes, covers a variety of information types and uses different methods purposes, and includes early warning information for the management of events, incidence data for routine control measures and health service usage for policy setting and programme development. Challenges in the Pacific include under-staffing, high staff turnover and existing systems that may be complicated or cumbersome. The key to improving surveillance capacities is to keep the systems simple, and to ensure that they capture (receive and analyse) information from all relevant sources. For early warning systems, where timeliness is critical, it is desirable to minimise the need for laboratory confirmation. Early warning surveillance can also focus on syndromic reporting (clinical signs and symptoms) which might, for example, cover a relatively short list of priority diseases, while also including a prompt for "other events of potential public health significance". This approach provides a practical and effective system, and will also help capture unusual or unexpected events or anything that may be of interest but which is not explicitly provided for on a pre-determined list. Early warning surveillance can be supplemented by other forms of

surveillance, such as laboratory surveillance and other reporting of notifiable diseases as necessary to meet legal requirements.

At both the local and national levels, surveillance systems must be closely linked to the capacity to investigate and rapidly implement comprehensive control measures. Depending on the circumstances, such measures may include a public health response but also infection control, risk communication and collaboration with other sectors.

PICs were encouraged to take advantage of existing projects and work programmes when assessing and implementing options to strengthen capacities across the five APSED areas, i.e. surveillance and response, laboratory, zoonoses, infection control and risk communication. This work should continue to involve other sectors and government agencies to ensure a coordinated approach to capacity building. A further priority for activity is ongoing work to strengthen core public health capacities at points of entry, including routine surveillance for arriving ships and aircraft, vector control and the capacity to respond rapidly and effectively to public health events detected at the border.

Participants agreed that ongoing development for the public health workforce was likely to continue to be both one of the biggest challenges, and one of the critical success factors if the goal of meeting IHR-APSED capacity requirements by June 2010 is to be met. To this end, the meeting endorsed the need to prepare a comprehensive training plan to identify and address priority workforce needs.

1. INTRODUCTION

The Second Meeting of Pacific National Focal Points for the International Health Regulations (2005) was held in Rarotonga, Cook Islands from 14 to 16 October 2008.

1.1 Objectives

The objectives of the meeting were:

(1) to review progress and identify next steps in:

(a) strengthening and maintaining the core functions of National IHR Focal Points;

(b) APSED and IHR assessment, workplan development and implementation; and

(b) building capacity in outbreak response; and

(2) to consider the approaches for establishing a mechanism to collect disease and public-health-event information that will allow prompt response required under IHR (2005).

1.2 Opening session

1.2.1 Opening remarks

Dr Kevin Palmer, WHO Representative in Samoa

On behalf of Dr Shigeru Omi, WHO Regional Director for the Western Pacific, Dr Palmer thanked the Government of Cook Islands for hosting the meeting and welcomed the participants. The International Health Regulations (2005), which have been in force since June 2007, set out a common framework for managing health threats. The IHR (2005) create a range of obligations for both WHO and Member States. The Asia Pacific Strategy for Emerging Diseases (APSED) sets out an implementation framework for developing the core IHR (2005) capacities for surveillance, risk assessment response and reporting. Ten countries in the Pacific region have completed core capacity assessments and developed detailed implementation plans. While considerable progress has been made, capacity gaps still need to be addressed before the Pacific region can have an adequate level of collective health security. Several IHR (2005) components are particularly relevant to the Pacific, including the focus on protecting health while not unduly interfering with travel and trade. In order to detect and manage public health events early, i.e. while they are still relatively localized and their impact not too great, countries need good surveillance systems, effective response capacities and an established mechanism for the assessment and reporting of such events. See Annex 1 for Dr Palmer's full speech.

1.2.2 Welcome speech

Hon. Tangata Vavia, Associate Minister of Health, Cook Islands

The Associate Minister welcomed the participants to what promised to be an important meeting. He thanked WHO for its leadership in driving forward the implementation of the IHR (2005) and, in particular, for the assistance it has provided to Pacific island countries and areas in this regard. In the 12 months since the first meeting of Pacific National IHR Focal Points, a number of objectives have been met. However, further work is required to prepare for the agreed deadline of 2010. Severe acute respiratory syndrome (SARS) was a timely reminder of the impact of emerging infectious diseases on regional economies. Along with the loss of life, this event highlighted weaknesses in surveillance and response capacities at different levels in a number of countries. Meetings such as this one offer an important opportunity to compare progress and to share and gain expertise to meet such challenges. In the Pacific, inadequate financial resources pose an ongoing challenge to efforts to further strengthen health services capacity and capability. However, prioritization and strong leadership, including from the meeting participants, can help to pave a way forward. For example, Cook Islands recently established an Event Surveillance and Response unit within the Ministry of Health to provide leadership on IHR (2005) and to coordinate APSED planning and implementation.

1.2.3 Meeting objectives

Dr Takeshi Kasai, Regional Adviser, WHO Western Pacific Regional Office

This meeting serves an important part in the process of promoting awareness and maintaining planning activities for the implementation of IHR (2005) and APSED. As agreed at the first meeting of Pacific National Focal Points, held in Fiji in October 2007, this meeting also provides an opportunity to review progress made and difficulties encountered over the last 12 months, and to build agreement as to the objectives to be actively pursued for the coming year. A particular focus will be on the operation of National IHR Focal Points and surveillance and response, as these functions are fundamental to the international flows of information and managing the impacts of emerging infectious disease respectively.

1.3 Appointment of Chairperson, Vice-Chairperson and Rapporteur

Dr Josephine Aumea Herman, Director of Community Health, Ministry of Health, Cook Islands, was appointed as Chairperson for the meeting. Dr Malakai 'Ake, Chief Medical Officer of Public Health, Ministry of Health, Tonga, was appointed as Vice-Chairperson. Ms Leilani Matalavea, Health Information and Communications Specialist, Ministry of Health, Samoa, was appointed as Rapporteur.

1.4 Organization of the meeting

The Second Meeting of the Pacific National Focal Points for the International Health Regulations was held over three days, from 14 to 16 October 2008, in Rarotonga, Cook Islands. The agenda and programme of activities are attached in Annex 2.

Eighteen representatives from Pacific island countries and areas (PICs) attended the meeting. A list of participants is in Annex 3.

The methods of work included plenary presentations and panel discussions on various aspects of the implementation of the IHR (2005) and APSED, including event-related communications, IHR-APSED capacity assessments, workplan implementation, and surveillance and response functions. The participants held group discussions on the use of the IHR Decision Instrument and on proposals for strengthening Pacific capacities for outbreak/event detection,

assessment and response. Draft findings, conclusions and recommendations were presented by the Chairperson at the final plenary session for review. Temporary advisers from the Secretariat for the Pacific Community (SPC) and the University of Newcastle, Australia provided technical assistance to the meeting. Observers from the Government of Cook Islands, Australian Agency for International Development (AusAID), SPC and the UN System Influenza Coordination attended. A consultant from the Ministry of Health, New Zealand was also engaged by WHO to assist.

2. PROCEEDINGS

2.1 Session One: Update of IHR (2005) and APSED implementation

Chaired by Dr Josephine Herman

Dr Herman noted that the meeting would assist the participants to identify strategies for overcoming the planning and resourcing challenges they are likely to confront upon their return home.

2.1.1 Implementation of the International Health Regulations (2005): a global update

Dr Max Hardiman, Medical Officer, WHO Headquarters

Dr Hardiman expressed his appreciation at the opportunity to enhance his "Geneva-based perspective" of IHR (2005) with the practical achievements of countries working on day-to-day implementation. He reminded the participants that IHR (2005) can be thought of as a global toolkit for maximizing health security. The IHR (2005) seeks to minimize interference in travel and trade while protecting the public health of all peoples – this is important, as trade helps to build national economies, and strong economies build healthy societies.

Two main sets of responsibilities are defined in IHR (2005), one set for Member States and the other for WHO. The National IHR Focal Point (NFP) is a critical component in the implementation of IHR (2005). Personnel associated with the NFP function often play a leadership role within their country as well as perform important communication and coordination functions within their health systems and across other government agencies.

The WHO framework for global alert and response employs an event management process involving information receipt (taken from a variety of sources), screening and verification of information and, when appropriate, risk assessment. In addition to WHO's mandate to declare a public health emergency of international concern (PHEIC), which to date has not occurred, the next steps in event management usually involve disseminating information to the public and assisting with country-level responses.

Technical coordination and support are central to WHO's operations and are explicitly mandated in IHR (2005). WHO recognizes that countries may be anxious to share information about public health events that may be in the interests of global health security. WHO also acknowledges that it needs to support a response that does not have an adverse impact on the local situation. WHO has developed a number of guidelines and training materials to assist countries with defining the role of the NFP, applying the Decision Instrument, and using APSED self-assessment checklists. Meeting participants were encouraged to review and use these documents to assist them with their planning.

Risk communication is also a key aspect of responding to significant public health events. Providing timely, accurate and credible information to other agencies, community groups and the public can influence the course of the event. Member States are required to report to WHO (and to each other through WHO) on their progress with implementing IHR (2005). Some common themes have emerged across the six regions:

(1) the need for, and value of, intersectoral advocacy on IHR (2005) at national level;

(2) capacity assessment and building across a number of functional areas, including surveillance and response, training in field epidemiology, core capacities for points of entry (PoEs) and legislation;

(3) the value of intercountry meetings, e.g. for NFPs and PoEs; and

(4) identification and training of regional experts.

In keeping with the experience of many nations around the world, these themes are also relevant to IHR (2005) implementation in the Pacific region.

2.1.2 IHR (2005) and APSED implementation progress in the Asia Pacific Region
Dr Takeshi Kasai, WHO Western Pacific Regional Office,

The South-East Asia and Western Pacific Regions remain global epicentres for emerging infectious diseases. Given the increasing risk of cross-border transmission, the entry into force of IHR (2005) in June 2007, and recent experiences with SARS and avian influenza, WHO determined that a biregional approach would be more effective than each region working in isolation. The resulting Asia Pacific Strategy for Emerging Diseases was designed to assist with pandemic preparedness and contribute directly to IHR (2005) compliance. The APSED framework also helps to strengthen the capacities needed for the routine and ongoing management of infectious diseases and other public health threats. Pandemic preparedness builds on the plans as already completed by most countries, and seeks to promote readiness for event-specific purposes and strengthening the performance of routine public health functions. APSED planning focuses on five areas:

(1) Surveillance and response: including conventional indicator-based surveillance and event-based surveillance (incorporating all relevant information sources), with surveillance closely linked to response capacities at both the local and national level.

(2) Laboratory: providing timely, accurate and safe diagnostic services to inform surveillance and response activities.

(3) Zoonoses: Since 60% of emerging diseases are of animal origin, strong collaboration between human and animal health services is vital for risk reduction.

(4) Infection control: strengthening infection prevention and control in health care settings – this being an area for which progress has proved difficult and which therefore remains a priority for training and resourcing. Key actions include the establishment of a national centre to coordinate infection control activities, to promote training and to function as a single point of contact. In the Pacific region, the Pacific Public Health Surveillance Network's PacNet facility could provide an existing platform to support infection control.

(5) Risk communication: identifying and training spokespeople and the development of workplans covering operational communications, outbreak communication and communication for behaviour change.

Thirty countries in the Asia Pacific Region, including all Pacific island countries, have conducted APSED capacity assessments. Ten Pacific island countries have developed detailed implementation plans based on their assessments. This represents significant progress and provides a strong basis for further implementation activity. However, the Pacific region still faces major challenges in human and financial resources and remains vulnerable to disease threats.

The Chairperson invited comments and questions:

(1) Many PICs still require support for training and coordination of implementation activities. For example, although risk communication training was provided, not every country was able to attend. Dr Kasai noted that PICs were not intentionally excluded and that this issue may be re-visited, as risk communication certainly figures prominently in the APSED framework.

(2) In relation to the transport and trade of goods, such as contaminated milk products, clarification of reporting requirements was sought. In response, Member States were strongly encouraged to share information on the transport and trade of contaminated goods. A number of mechanisms are available to facilitate information sharing, depending on the circumstances of the event. For contaminated milk, the INFOSAN framework was considered to be the most appropriate. It was also noted that countries were free to exchange information with each other, i.e. reporting to WHO does not preclude bilateral information sharing.

(3) Why has WHO developed the indicator system for IHR capacity assessments, which is different from the APSED framework? While the APSED approach covers only two of WHO's six regions, it is compatible with the IHR capacity requirements for surveillance and response.

(4) The IHR (2005) recognizes the need to minimize unnecessary interference with international traffic and trade, while protecting public health. It was noted that border closures for extreme events might be seen as contradicting this objective. However, in response to an extreme threat, such as pandemic influenza, significant and even disruptive measures at the border may be appropriate. In this sense, pandemic influenza should certainly come under the APSED framework, as it covers all (existing and) emerging diseases – and is considered preferable to developing programmes on a disease-by-disease basis.

(5) Surveillance and response has emerged as the most critical component of preparedness for a wide range of disease threats. Papua New Guinea, which has a large population spread over a wide and often inaccessible area, has a national centre for coordinating surveillance and response activities.

2.2 Session Two: IHR (2005) event-related communications

2.2.1 WHO's operating procedures for managing acute public health events
Dr Takeshi Kasai, WHO Western Pacific Regional Office

The WHO process for managing event-related communications can be thought of as a global standard operating procedure (SOP) for event management under IHR (2005). This ensures that a uniform approach is used across WHO's three organizational layers: Headquarters, the six regions and more than 140 country offices. Four principles have guided the development of this approach: consistency, timeliness, technical excellence and transparency and accountability. Risk assessments of public health events are conducted by WHO at the regional and global level, as well as by countries themselves prior to reporting events to WHO. Within WHO, a number of programmes or activity areas may be involved in a structured risk assessment, depending on the nature of the event concerned. This is essential given the "all hazards" scope of IHR (2005), which cover radiological and chemical hazards as well as events involving new diseases or even those of unknown origins. The intention is to ensure that risk assessment can inform decision-making by WHO and countries for both event verification and response purposes. This system is also linked to the Global Outbreak Alert and Response Network (GOARN), which supports information sharing and investigation and response activities.

The Chairperson invited comments and questions:

(1) Implementing effective surveillance systems remains a challenge in small islands. Where can staff access technical advice on event-based surveillance to complement conventional indicator-based surveillance, for which some capacity is generally already in place? Both WHO and the SPC can provide assistance in this regard.

(2) Only five of the participants indicated that they had accessed WHO's secure event website (though it was noted others from their offices may have).

(3) Tonga's surveillance system uses a mixture of notifiable diseases, syndromic surveillance and reporting from a variety of informal sources. For the purposes of clarification, is this event or indicator surveillance? It was acknowledged that, in practice, most surveillance systems are a mixture of indicator- and event-based information, such as in Tonga. The intention is neither to differentiate surveillance systems, nor to discontinue existing systems that work well. Rather, the objective is to ensure that surveillance is timely and able to capture unusual or unexpected events, as reported from *any* source, as well as the diseases and syndromes that are routinely detected, and which might be explicitly provided for in the reporting template or specified in law.

(4) Strengthening human resources and extracting maximum value from existing systems and structures may figure as a priority for getting the region to meet the 2010 timeframe. APSED and IHR (2005) provide the objectives and a "road map", but the means of achieving these goals will often rely on local staff and their skills and resources.

2.2.2 Review of IHR (2005) event communications in the Western Pacific Region
Dr Li Ailan, Medical Officer, WHO Western Pacific Regional Office

Gaining a clear understanding of how WHO manages communications with NFPs, and specifying in advance how NFPs should coordinate with relevant senior officials in the Ministry of Health and other government agencies, will significantly enhance event communication. NFPs are required to be available 24 hours a day, seven days a week. They are

also expected to collect and consolidate information from, and disseminate information to, health services, PoEs and other government agencies. NFPs also play very important roles in event investigation, verification and risk assessment at the national level. NFPs may share information through consultations with WHO and should make formal notifications when required under IHR (2005). NFPs should send routine communications to the WHO country office, but urgent communications should be sent to the WHO Regional Office in Manila and copied to the country office. A duty officer at the WHO Regional Office is available "24/7" for this purpose. As of September 2008, the Regional Office had received reports of 33 events, more than 80% of which were related to infectious disease. Only a small number of events were chemical, radiological or of unknown origin. Information sharing takes many forms and formal notifications (under Article 6) made up only eight of the 33 events reported. None of these events resulted in WHO formally determining them to be a PHEIC – this should reassure countries that notifying events will not necessarily lead to further escalation.

Based on the WHO Regional Office's experience to date, some Pacific NFPs are not accessible at all times, which suggests a need to further strengthen and maintain NFP capabilities. Additionally, many countries do not have a pre-agreed process for activating and applying the Decision Instrument, as provided for in Annex 2 of IHR (2005). The keys to effective event communication at national level are investigation and risk assessment of any suspicious event or potentially serious outbreak, and early consultation with WHO. If they have not already done so, PICs should develop standard operating procedures for these functions and then test them in exercises at national and subnational levels.

The Chairperson invited comments and questions:

(1) While none of the 33 events brought to WHO's attention, including eight formal notifications, was determined to be PHEIC, it was emphasized that the reporting was not wrong. Quite the opposite – countries were encouraged to continue sharing information with WHO to ensure that its global surveillance function is both sensitive and timely. This will increase the likelihood that WHO will detect a PHEIC as early as possible.

(2) Reporting of problem goods and contaminated foods (including product recalls) can often occur under extreme media scrutiny. It is important to manage infectious disease events with this in mind.

(3) Some countries have reported dengue fever to WHO under IHR (2005). What is the pathway for moving from PacNet to WHO for event reporting? Under IHR (2005), the Decision Instrument (Annex 2) guides countries in determining what events should be notified to WHO. However, countries may share information via PacNet and under IHR (2005). Countries that are uncertain about notifying a particular event can seek advice from WHO on best to proceed. Reporting, either via PacNet or to WHO, should be seen as a positive step, as it helps to inform neighbouring countries and regional organizations that can assist with coordination across countries, should this be required.

(4) Routine communications should go through the WHO country office. In an emergency, or when the country office is unavailable, countries should communicate with the Regional Office in Manila and copy the country office so it is aware of the situation. Countries need not worry about communicating with WHO in Geneva, as the Regional Office will inform WHO Headquarters as appropriate.

(5) The list of Pacific NFPs needs to be updated, as there has been some turnover of personnel. It was noted that WHO maintains a master list of all NFP contact details, and that this information is available to all NFPs via the secure WHO event website.

2.2.3 Multidrug-resistant tuberculosis: Federated States of Micronesia
Dr Joanes Sarofalpiy, Medical Director, Department of Health and Social Affairs

The Federated States of Micronesia learnt the importance of early detection, risk assessment and response when cases of MDR-TB were detected and confirmed. The tuberculosis cases were resistant to the most potent first-line drugs, with the same infectivity and clinical spectrum as susceptible TB. However, these cases proved much more complex. Treatment took longer and was more expensive. Three of the four laboratory-confirmed cases died. A local risk assessment and investigation were hampered by limited resources. Chuuk Hospital requested assistance from the Department of Health and external partners. The investigation was compounded by a concurrent outbreak of hepatitis A. Data were gathered on baseline rates of TB and MDR-TB in Chuuk and the Federated States of Micronesia. After cases were re-interviewed, it was determined that there was no history of MDR-TB in Chuuk. Five further cases were identified, along with 218 contacts, of which 215 were interviewed and physically examined. The five further cases and the one surviving initial case were all hospitalized. Ten directly observed treatment (DOT) workers were hired, and regulations were invoked to restrict movement of the cases.

After a risk assessment and consultation with WHO and the NFP, the IHR Decision Instrument was applied. As a result, a decision was made to notify the event to WHO. The decision was based on the severe public health consequences, the outbreak being unusual and the potential for travel restrictions. It was seen as the best way to support information sharing and to reassure the public, neighbouring counties and regional partners. WHO responded within 24 hours with further advice. Guam raised concerns about the possible spread of MDR-TB and prepared legislation that could be used to restrict travel. The Federated States of Micronesia and the Guam Departments of Health advised that restricting travel in this way was not recommended on epidemiological grounds, but the legislation was passed anyway. In conclusion, earlier notification and/or discussions with regional partners may have helped to prevent unnecessary travel restrictions. There was also some confusion about the position of territories in terms of responsibilities under IHR (2005), particularly in terms of the roles of the United States Centers for Disease Control and Prevention and Federated States of Micronesia in the notification process.

The Chairperson invited comments and questions:

(1) Did WHO follow up on the travel restrictions legislation? The Chairperson noted that Guam is not a WHO Member State and that WHO has, at best, only limited ability to influence the content of laws made by any country. However, WHO did ask the United States of America, of which Guam is a territory, to address issues relating to IHR (2005) that arose because of this law. As of early October 2008, WHO had not yet received a response. Dr Hardiman advised that countries could adopt laws that allow travel to be restricted, but that their implementation and enforcement should, for WHO Member States, be consistent with IHR (2005) – especially as there are other strategies that may be more effective for managing the risk to public health.

(2) Has travel by people from Chuuk to Guam been restricted? Dr Sarofalpiy stated that, to his knowledge, travel restrictions had not been imposed under the new law. Dr Duguies, Department of Public Health and Social Services, Guam, confirmed this response and advised that no executive order has been signed to put travel restrictions into effect in this case.

(3) What caused the delay between the diagnosis of MDR-TB and notification? While the process of determining the significant public health event took several months (including laboratory testing in both Hawaii and California), the application of the Decision Instrument and subsequent notification were completed within a few days.

(4) It was noted that Papua New Guinea has decentralized some of its public health functions and may need to revise its law to allow full compliance with IHR (2005).

2.2.4 Dengue outbreak in Fiji: detection, assessment and response
Dr Eric Rafai, National Adviser, Communicable Diseases, Ministry of Health, Women and Social Welfares, Fiji

Multiple reports of dengue fever on PacNet provided advance warning to Fiji that an outbreak was likely to occur. Apparent cases were present from January 2008, though concurrent cases of typhoid were also reflected in the results of rapid testing. This complicated the surveillance picture and the establishment of baseline data. From September 2008, clinical cases started to present and closer scrutiny of laboratory results suggested an outbreak of dengue. Fiji applied the Decision Instrument and the information available suggested positive answers for all four questions. Subsequently, it took more than five days to gain the necessary authorization for the notification to WHO. From June 2008, when the situation was still unclear, a precautionary approach was adopted and a number of control measures were implemented. Syndromic surveillance was only of limited assistance and it was laboratory testing that provided the critical information. The Decision Instrument was applied promptly, but the clearance took much longer. There was also some confusion as to the personnel involved in the NFP function. Logistics support for response measures was mobilized even before the outbreak was confirmed. This allowed vector control to be implemented in a timely manner.

The Vice-Chairperson invited comments and questions:

(1) Should dengue fever be notified? While this will depend on the circumstances considered during the application of the Decision Instrument, Tuvalu, Vanuatu and others argue that dengue should be reported so that appropriate counter-measures can be implemented.

(2) Cook Islands noted that mass gatherings such as festivals and cultural events can involve large numbers of travellers moving over short periods of time. If an event occurs in association with a mass gathering, information sharing might be discouraged on the grounds of tourism or economic concerns – even though public health risks may be greater and the need for transparency more important. If accurate, credible and balanced information is not disseminated by the public health authorities in such situations, then the media and public may seek advice from potentially less objective or reliable sources.

(3) It was noted that occurrences of dengue fever, while often significant, are not public health events of international concern. Therefore, how many cases should trigger reporting? There is no pre-determined number, but when a significant increase in the number of cases is observed, or when cases are continuing throughout the year, it does warrant reporting. Such information sharing can yield benefits, for example, access to technical advice and assisting others to assess the need for preventive measures. In general, earlier and more transparent reporting is better for all.

(4) SPC and WHO often share information with each other to ensure a common understanding of events and to provide coordinated advice on appropriate responses.

(5) Public health practitioners generally agree on the importance of information sharing, but in reality there can be other considerations, outside the health sector, that can inhibit the disclosure of information. With the new IHR, there is an opportunity for countries to share information within an agreed, shared framework, complete with safeguards about how such information might be used. It is hoped that countries will gain confidence in using the various mechanisms available for information sharing and will increasingly come to trust that the information will only be used and disclosed appropriately. The secure WHO event website is such a mechanism. It was also noted that asking for technical advice about an event, for example, by phone, does not commit a country to subsequent notification or consultation.

(6) Based on shared training experience, it was noted that African and Asian countries often prefer to await laboratory confirmation before reporting events, but this is not always practical for PICs, as this can add weeks or even months to the timeframe. Hence early information sharing and consultation is recommended.

(7) It was noted that PacNet is intended for early warning purposes, rather than a platform for detailed information exchange.

(8) NFPs are not always the final decision-makers for notification, even though NFP staff tend to play a vital role in gathering and sharing information across different government agencies and may contribute to the risk assessment. Under IHR (2005), NFPs should have the authority to make formal communications with WHO, but it was acknowledged that other decision-making structures may be involved as well.

2.2.5 Outbreak response in the Pacific
Dr Boris Pavlin, Epidemiologist, WHO, South Pacific

Why is it important to investigate outbreaks? While the immediate objective is to help stop the outbreak, other reasons include: to better understand why outbreaks occur, to prevent similar events in the future, to improve our knowledge about the disease, to improve our surveillance and response systems, and to train staff. A pertussis outbreak in the Federated States of Micronesia was used to illustrate the steps to be taken during an outbreak. The first step is to confirm that an outbreak is really taking place. To do this, determine if an extraordinary number of cases are being reported, review other surveillance data, talk to local health clinics, and eliminate seasonal variations, notification artefacts or diagnostic bias (for example, as might arise after the introduction of a new laboratory test). If an outbreak is confirmed, then it may be prudent to gather additional resources and expertise, depending on the circumstances. It may also be appropriate to initiate preliminary control measures, even if only as a precaution.

The second step is to develop a simple and practical case definition, i.e. which sick people are to be considered part of the outbreak, and then to use this case definition to investigate further, in particular to find other cases and their contacts. It is important to gather basic information on the following:

(1) Person: What kinds of people are cases?

(2) Place: Is there a common location, occupation, food outlet or other exposure?

(3) Time: When did symptoms start to manifest? How is the event spread over time?

For practical purposes, make a "line list" for each case to record case details such as name and unique identifier (if two people have the same name), sex, age, location, onset and nature of symptoms. The line list can also include information on the case's travel history, risk factors and contacts. As a related step, gather information about the general population (the denominator) in order to help understand the context within which the cases (numerator) arise. If possible, describe the data as they are gathered. Analysing the distribution of cases by person, place and time can help investigators to develop a hypothesis as to who is most at risk, what is the disease, and what (or where) was the source. This information should be used to inform further response measures, for example, to control the source or interrupt transmission. During the investigation and response stages, it is also important to provide, and to continue providing, information to the public, media and other agencies. After the event, summarize what happened and communicate the results. It is worth remembering that the first case to present at a health care centre is not usually the first case. Hence, it is important to have good surveillance systems in place, both formal and informal information gathering, to increase the likelihood of early detection.

It was noted that this information needs to be distributed to the remote areas of many of the countries present to help support field epidemiology in outlying islands and areas.

2.2.6 Group work on the Decision Instrument

The participants were divided into three break-out groups. Each group used the IHR (2005) Decision Instrument to assess three different scenarios and to decide whether or not the events should be notified to WHO.

2.3 Session Three: IHR (2005) and APSED assessment and country workplan development in the Pacific

2.3.1 Group work on IHR (2005) and APSED implementation

The participants were split into two groups and invited to review progress made, challenges faced and strategies for going forward with IHR (2005) and APSED implementation:

2.3.1.1 Group 1 feedback

Assessment and planning processes used by PICs:

(1) Identify, mandate and resource the unit to lead and/or coordinate assessment and planning processes.

(2) Actively engage with other sectors to assist with capacity assessments, planning and implementation.

(3) New Caledonia worked with France to clarify NFP procedures and responsibilities.

(4) Be flexible, and if necessary, be prepared to revise the workplan as implementation proceeds.

(5) Harmonize APSED capacity-building with pandemic planning and other emergency management plans.

(6) Include funding priorities (and consideration of alternative funding sources) in the planning process from the very beginning.

Main capacity gaps identified:

(1) Lack of a central surveillance and response unit

(2) Workforce capacity *across all areas*, e.g. surveillance and risk assessment, response teams and the implementation of the new Ship Sanitation Certification regime

(3) No clear thresholds for indicator-based surveillance alerts

(4) Inadequate infection control in outlying health clinics

(5) The need to strengthen event-based surveillance, including reporting from informal channels

(6) Laboratory – need to promote accurate, safe and timely diagnosis, e.g. by promoting information sharing and basic epidemiological training

(7) Zoonoses – need to strengthen animal health capacity (e.g. few or no vets), early detection and communication channels between animal and human health

(8) Need for education, SOPs and training for infection control

(9) Limited legal expertise

(10) Need for ongoing awareness-raising and training because of staff turnover

Priority actions and activities:

(1) Establish a central public health surveillance and response unit.

(2) Build workforce capacity across all core capacities, including surveillance, response and points of entry, and coordinate these at national and local levels.

(3) Carry out active surveillance of maritime traffic, e.g. prioritize ship sanitation inspections towards contamination and communicable disease hazards that might represent a potential PHEIC.

(4) Review existing legislation and provide training on new legislation.

(5) Review pandemic plan following completion of APSED capacity assessment.

(6) Secure a high-level mandate for human and animal health sectors to collaborate and maintain routine communications.

(7) Begin and complete APSED assessments where this has not already occurred.

(8) Use the capacity assessments and gaps identified to seek funding.

(9) Establish infection control committees in health care facilities.

(10) Plan exercises to test new systems and capabilities.

Key challenges:

(1) Capacity assessments suggest that responsibilities for various core capacities can be spread across a range of existing plans and agencies.

(2) Countries will need technical guidelines to ensure the issuance of the Ship Sanitation Certificates and training to support their implementation.

(3) Funds (and skilled staff) are insufficient to implement plans.

(4) Collaboration with emergency management and health promotion is needed to build risk communication capacity.

(5) Key points of entry need to be identified for health protection capacity-building.

(6) Other priority programmes, e.g. HIV, TB or malaria, are competing for resources.

(7) Communicating and working with local communities to promote understanding, as health priorities may not be the same as wider community priorities.

(8) Communications with remote locations can present challenges.

(9) The 2010 timeline will be a challenge for some, given the amount of work.

Strategies to address key challenges:

(1) Achieve consistency within and between countries, e.g. IHR border control functions.

(2) Do not duplicate existing plans and systems where these can be adapted for IHR (2005) and APSED purposes.

(3) Advocate for senior officials to provide leadership and seek political commitment to support workplan implementation.

(4) Clarify the content of the workplans, so as not to duplicate existing planning structures.

(5) The APSED planning process helped secure funding for capacity-building in Papua New Guinea, e.g. for surveillance and laboratory capacities.

(6) Maintain routine communications with regional partners so that these networks are well established and available for alerts and outbreak response.

(7) Maintain a balance between short-term and long-term training needs.

(8) Retain a "can do" attitude.

2.3.1.2 Group 2 feedback

Assessment and planning processes used by PICs:

(1) Multisectoral participation in assessment and planning

(2) National and provincial participation

(3) Some used IHR (2005) and APSED tools; others did not.

Main capacity gaps identified:

(1) Human resources

(2) No laboratory surveillance and limited support for outbreaks, diagnostics and shipping of specimens

(3) Policy and legislation to ensure reporting

(4) No guidelines and SOPs, including for biosafety

(5) Stock management

(6) Surveillance

- (a) Technical needs
- (b) Understanding requirements of IHR, e.g. surveillance function seen as secondary
- (c) Human Resources – positions and training
- (d) Limited use of data – analysis capacity
- (e) Duty roster for IHR (2005) required
- (f) Public health legislation not supportive of IHR (2005)

(7) Infection control

- (a) No national policy, guidelines or training
- (b) No hospital acquired infection surveillance
- (c) Inadequate isolation facilities
- (d) Lack of equipment for infection control, e.g. personal protective equipment (PPE)
- (e) No national coordinator

(8) Risk communication

- (a) No SOPs or guidelines at national level for disseminating information
- (b) Communication difficulties – multiple languages, infrastructure
- (c) Lack of training for spokespersons, information and education developers, outbreak communication developers

(9) Zoonoses

- (a) Limited communications between animal and human health sectors
- (b) No animal laboratory

(c) Lack of zoonotic disease control personnel
(d) Limited SOPs and information, education and communication (IEC) materials

(10) Points of entry

(a) No SOPs for managing sick persons at points of entry
(b) Lack of updated legislation and policy
(c) Lack of effective communication and coordination
(d) Limited public health facilities
(e) Lack of personnel

Priority actions and activities:

(1) Completed actions

(a) Some country plans completed
(b) Revised standardized national notifiable diseases system
(c) Production of weekly surveillance bulletins
(d) New national infection control guidelines
(e) Increased information sharing on PacNet

(2) Actions planned

(b) Improve surveillance in outer islands.
(c) Establish infection control committees and develop guidelines and SOPs.
(d) Carry out studies, e.g. vector survey
(e) Conduct training.
(f) Develop partnerships between animal and human health sectors.
(g) Advocate for policy and legislation.
(h) Strengthen laboratory capacity – accreditations (continue 'twinning').
(i) Strengthen advocacy for IHR (2005) and APSED.
(j) Carry out programme monitoring and evaluation.
(k) Organize meetings and workshops.

Key challenges:

(1) Coordination of autonomous states by way of a national plan

(2) Competing priorities and funding constraints

(3) Lack of human resources with capacity and funding

(4) Policies not in place

(5) Time

(6) Communication

Strategies to address key challenges:

(1) Expand and strengthen surveillance systems.

(2) Capitalize on existing projects and programmes.

(3) Devise more effective lobbying for local budgets.

(4) Upgrade health information system – including laboratory data.

(5) Create infection control committees.

(6) Train staff in zoonotics.

(7) Upgrade points of entry to provide space for medical examinations.

Discussion points:

(1) Can electronic surveillance information be shared by states to others? Answer: Yes, but information sharing must go through the national level (i.e. be approved by the Secretary).

(2) Who uses the APSED assessment tool?

(3) How can the challenges of isolation and quarantine, e.g. in Nauru, be addressed? For example, TB cases are not isolated. Answer: Police can be involved in isolation.

(4) Animal and human health coordination is lacking. Have any activities brought them together? Answer: Pandemic planning has certainly helped.

(6) Niue has not yet fully completed the APSED workplan, but may try to come together with the animal health sector to develop a plan on zoonoses component after this meeting.

(7) Is there a possibility for feedback for IHR reporting to countries? Answer: Yes, if received.

2.3.2 Overview of Pacific IHR-APSED capacity assessments and workplans
Dr Zhou Weigong, Medical Officer, WHO Western Pacific Regional Office

Overall, the assessments suggested that laboratory services were well positioned in terms of existing capacities, and that zoonotic disease and infection control were the areas in greatest need of further capacity-building.

Surveillance and response: The majority of countries reported either "yes" or "partially" to the overall surveillance and response checklist. A quarter of responses were "no". For legislation and policy, only one country currently has adequate legislation, four have none, and nine reported the need to revise laws to achieve IHR (2005) compliance. Five countries have fully functioning indicator-based surveillance and most have some system in place, although analysis is not conducted routinely. For event-based surveillance, only one country reported the capability to rapidly detect events in the community, two countries reported the capacity to investigate events and have national centres able to be contacted on a 24/7 basis. Six out of 14 countries have a national unit for outbreak response. Seven countries do not have

an on-call rapid response team. Only one country has a training plan for surveillance and response. Five have some form of training plan, but these plans are not always fully implemented. In 13 countries, staff involved at the national level in data collection, as well as verification and assessment of events and outbreak alerts, have either no or limited knowledge of the type of events that may constitute a potential PHEIC. Only three countries reported being fully capable of using the IHR Decision Instrument and notifying WHO within 24 hours, although eight reported a partial capacity in this regard.

Laboratory: Nine countries have "no" or only "partial" laws governing laboratory services. Ten countries have no or limited stockpiles of reagents or other supplies.

Zoonoses: Seven out of the 10 countries that completed this section do not have written SOPs for risk reduction during the preparation of animal products and associated transport.

Infection control: All 14 countries completed this section. Nine do not have infection control protocols for the management of patients with SARS and avian influenza. Ten reported no monitoring of antimicrobial resistance.

Risk communication: No country has public health staff trained in risk communication for outbreak investigation and response.

A positive outcome is that 10 countries have developed detailed IHR-APSED workplans and are actively engaged in implementation. From these 10 plans, the total funding requirements to address identified capacity gaps is estimated to be US$ 4.460 million. However, funding available from the 10 governments is set at about US$ 1.152 million, leaving an estimated shortfall of US$ 3.308 million.

2.4 Session Four: Surveillance and response

2.4.1 Highlights of Pacific IHR-APSED requirements on surveillance and response

Dr Julie Hall, Medical Officer, WHO Western Pacific Regional Office

Establishing a functional NFP – potentially involving a range of ministry of health staff, links to both clinical and public health services, communication channels with other departments, protocols for the use of the Decision Instrument and notifications – may require its own workplan. Because of its national, whole-of-health-sector, whole-of-government information collation and dissemination role, the NFP should be an integral part of the national surveillance and response structure. The NFP must also have sufficient seniority to communicate formally with other government departments and, on behalf of the government, with WHO.

Priority actions across the region include strengthening and maintaining core capacities for surveillance and response and event communication with WHO via the NFP. Another focus is the ability to respond to WHO requests for verification of events, to collaborate with WHO and other partners in conducting risk assessments. However, all of the above counts for little if it is not supported by the capacity to rapidly implement comprehensive control measures, including public health response, infection control, risk communication and collaboration with other sectors, for example, animal health in relation to avian influenza or other zoonoses. A further area of activity is ongoing work to strengthen core public health capacities at points of entry, including routine surveillance for arriving ships and aircraft, vector control and the capacity to respond to public health events detected at the border. These priority actions complement the five APSED work areas, which themselves provide a framework for giving effect to IHR requirements. In turn, both these support and contribute to pandemic preparedness. Participants were reminded that IHR (2005) also creates obligations for WHO. These include:

(1) designating IHR contact points to receive event-related communications, for example, to support consultation with, and notifications by, Member States;

(2) seeking further information in order to verify events;

(3) collaborating with Member States to assist with risk assessments and provide advice on control measures;

(4) formally determining whether events constitute a public health emergency of international concern, and if so, developing and issuing temporary recommendations (in effect, advice on how to manage a major emergency);

(5) coordinating an international response, if required, for example, by mobilizing GOARN partners;

(6) supporting national capacity-building, primarily through the activities of country and regional offices.

2.4.2 Strengthening national surveillance capacity in the Pacific
Dr Jacob Kool, WHO, South Pacific

Almost all the IHR-APSED requirements rely on surveillance. You cannot conduct a risk assessment, respond to an outbreak or notify an event if you do not know about it. Surveillance involves the systematic collection of useful data, the evaluation of these data and dissemination of the results to those who need to know – in short, information for action. Surveillance covers a variety of different strategies used for different purposes. These include early warning information for rapid response, incidence data for routine control measures and health service usage for policy setting and programme development. Challenges in the Pacific include under-staffing, high staff turnover and existing systems that may be complicated or cumbersome. While a lot of information may be preferred for analysis, time and resources may not permit it. For example, lengthy lists of notifiable diseases may not always be practical, especially when remote clinics may not have the ability to diagnose many of the conditions. As a result, data are not reported or are not used to inform event responses, policy development or priority setting. The key message for improving surveillance capacity is to keep it simple and functional:

(1) Start with the largest hospital(s) and only later extend it to other health facilities.

(2) Prioritize the diseases, i.e. those that are outbreak-prone, associated with high morbidity and/or mortality and diseases that you can actually do something about.

(3) Where possible, minimize the need for laboratory confirmation and focus on syndromic surveillance (clinical signs and symptoms).

(4) Streamline the system by using a relatively short list and including a field for "other events". This will provide a practical and effective system, and will also help capture unusual or unexpected events or anything of interest that are not explicitly provided for on the list.

In essence, keep it simple. However, if the existing system is working well, then seek to improve it rather than starting afresh. Sometimes it can be useful to "work backwards". Decide what information you need and who will use it for what purposes? Consider the resources you have available and what skills and further resources are needed to support the desired surveillance capacity. Then, design a simple and practical surveillance system, with defined

minimum data requirements for person, place and time. Ensure that the requirements are not too confusing or time consuming for the field staff in remote locations. As well as regular periodic reporting, such as by way of a monthly bulletin, there should always be the expectation that any potentially serious events should be reported immediately. WHO has a POLHN course available free of charge, and SPC and others also can provide further assistance with capacity-building for surveillance purposes.

The Chairperson invited comments and questions:

Long lists of notifiable diseases are often mandated in legislation, and so countries may have limited flexibility. It can be important (and is often useful) to have a framework of legally mandated notifiable diseases. However, just because certain diseases are specified by law, the early warning system does not have to be exclusively comprised of those diseases. Legal requirements for less urgent notifiable diseases can be supported through secondary reporting, for example, reported in a consolidated form on a slower track. The early warning surveillance, however, can include syndromic and event-based reporting, as well as the high priority notifiable diseases. In this way, the legal requirements can be met, as well as operating a sensitive and timely surveillance system.

2.4.3 Setting up an early warning and response system in Solomon Islands
Dr Tom Kiedrzynski, SPC

An early warning and response (EWAR) system was needed in Solomon Islands partly because the existing surveillance of outbreak-prone diseases was based on monthly reporting – this did not provide sufficient confidence that information would be received in time to allow a prompt response. Additionally, Solomon Islands had many displaced persons after the tsunami, and there was concern about disease outbreaks arising as a result of poor sanitation. The new system was based on existing case definitions and used the existing radio network for urgent reporting. An officer in the Ministry of Health was dedicated to overseeing the surveillance system nationally. In-country training was provided by SPC and PPHSN partners. The system incorporates syndromic surveillance as well as specified high-risk diseases. Thresholds for immediate reporting were set at a single case for some diseases and five cases for others. Weekly nil reporting (i.e. reporting that there are zero cases) is required. A response book, including line-lists (for basic person, place and time data) and response measures implemented, is used by front-line staff. For each condition, advice is provided on key activities such as specimen collection, clinical advice for the management of cases and guidance on appropriate public health interventions.

To promote sustainability of the system, a health professional should provide leadership at the national level. This person should also coordinate the provincial surveillance and response teams, for example, by facilitating the provision of equipment (drugs, PPE, laboratory supplies, etc.), logistics support and maintenance of the radio network. An evaluation is planned to review and further refine the system based on the practical experience gained.

2.4.4 Development of a syndromic surveillance and outbreak manual in Tuvalu
David Durrheim, University of Newcastle, Australia

It is vital to support local and provincial level surveillance capacities. No matter how good a system is at the national level, if the subnational capacity is not well supported, then the national system will ultimately be unreliable and may fail when it is most needed. Tuvalu has little animal husbandry and few tourists, which helps to limit the potential for disease importation and evolution. However, as Tuvalu has a young population, limited public health infrastructure, a relatively small public health workforce and is susceptible to extreme weather events, it needs

to have a simple and responsive surveillance and response system. The Ministry of Health identified nine syndromes to act as triggers for public health investigation, and then ensured that basic infrastructure was in place on each of the nine inhabited islands. The goals are to encourage immediate notification whenever certain syndromes are detected, to develop a user-friendly outbreak manual and to invest in training staff in outlying clinics. To ensure that the syndromic surveillance system was functioning, an active, weekly, nil-reporting system was instituted.

Evaluation clearly showed that the peripheral health staff appreciated the system and that it was effective in allowing timely recognition and control of outbreaks. However, key determinants of its sustainability include: having an energetic 'champion' at national level; ensuring that active nil reporting is maintained; providing a rapid response to support local syndrome detection; offering regular in-service training of staff; and providing feedback through regular surveillance bulletins.

The Chairperson invited comments and questions:

(1) How can others access the Tuvalu outbreak manual? A PDF version is on the Internet and Microsoft Word copies can be provided upon request if required for adaptation.

(2) Sometimes senior management or political leaders do not differentiate between public health surveillance needed for early warning purposes and national health information systems – this becomes a challenge for participants to educate their senior managers and politicians. For example, early warning systems do not have to include all notifiable diseases, as many of these can be captured by other, less time-critical, reporting mechanisms. Involving the WHO country office in such discussions can be help to provide expert, independent advice on the merits of different options.

(3) It was noted that early warning systems should not be dependent on confirmed laboratory diagnoses. Rather, they should provide an initial signal for further investigation.

(4) It was noted that when prioritizing diseases, one criterion can be whether or not a particular disease is amenable to intervention. (All other things being equal, diseases that can be prevented and/or treated are usually given a higher priority than those that cannot) However, even when a particular disease is not amenable to intervention, it can still be useful to gather incidence information to understand the associated demand for health services or wider social impact. It was acknowledged that this criterion alone should not be determinative. Rather, it should be one of several factors that can be considered in assisting countries to simplify surveillance systems and orient them towards priority conditions. This may also help to differentiate between information that is useful for clinical or policy purposes and information which is needed for urgent public health action. For example, mumps surveillance is useful for the former, but not the latter. Early warning systems need to be attuned to simple syndromic reporting, but additional information may also be required to support the wider planning and delivery of health services.

(5) Some countries have several surveillance systems, each with different objectives and strengths. Moving exclusively to a simplified surveillance system might mean that some events or conditions remain undetected. However, the intention is certainly not to weaken a composite surveillance system that is already in place and working well.

2.4.5 Surveillance and response system in Guam
Dr Lourdes Duguies, Communicable Disease Control Supervisor, Department of Public Health and Social Services, Guam

Guam's weekly *Epidemiology* newsletter was initiated in 2006. The newsletter summarizes 'passive' routine reporting of notifiable diseases from health providers, including a weekly total and a comparison of data from the same week from the previous year. It is supported by a morbidity report card with basic person, place and time information. Syndromic surveillance started in 1974, with suspected foodborne illness, and now includes information gathered each week from the main hospital emergency department, e.g. total admitted as well as the total presenting. Information is gathered on school attendance rates to provide early warning of possible health concerns in school-age children. This information channel can also assist with pandemic preparedness if, for example, school closures are required.

2.4.6 Traditional surveillance system in Niue
Manila Nosa, Chief Public Health Officer, Niue Health Department

To understand the context of Niue's surveillance system, consider a population of 1600 on one island, with 13 villages, one hospital and one flight a week. Surveillance was set up to detect outbreaks and to complement laboratory services. WHO and SPC provided public health and nursing staff, with the system becoming operational in June 2008. Line-lists (providing the basic person, place and time data) have been loaded into a computer, with information based on both indicator-based surveillance and syndromic surveillance using seven case definitions. The system is a simple, hospital-based model that supports both hospital usage and outbreak detection functions. Supporting guidelines provide thresholds to help evaluate the data. Weekly laboratory reporting is also captured by the surveillance system. The results are shared with hospital staff and provide reporting to the immunization focal person. Outbreak investigation can be initiated quickly and control measures implemented. Information is forwarded monthly and quarterly to the Niue Government, WHO and SPC.

2.4.7 National surveillance system in Fiji
Dr Eric Rafai, National Adviser Communicable Diseases, Ministry of Health, Women and Social Welfare, Fiji

Fiji recently conducted evaluations of surveillance activities, including consideration of several different information systems, each with its own objectives. Fiji has 46 notifiable diseases requiring compulsory weekly reporting. This reporting applies to private sector general practitioners and laboratories. Reflecting the geography and structure of health services, outbreak responses are generally coordinated at the local level. Fiji has a communicable disease reporting bulletin, produced monthly, incorporating both syndromic and laboratory-confirmed data. Challenges identified include the lack of a national disease surveillance unit, and coverage issues relating to private medical practitioners and private laboratories. Additionally, surveillance data are gathered separately from where the analysis and dissemination are expected to occur. Basic logistics can also be difficult for the eastern group of islands.

2.4.8 Communicable disease surveillance in Papua New Guinea
Dr Alex Rosewell, Epidemiologist, WHO, on behalf of Papua New Guinea

Papua New Guinea maintains a National Health Information System, comprising passive, monthly, reporting of communicable diseases, vaccination, pharmaceutical, cold chain and other information from health care facilities. The communicable disease component is largely syndromic and begins with front-line staff using a simple, paper-based system. The information is converted into electronic form at the provincial level and then referred to the national centre.

Each week, the national centre actively seeks surveillance data from provincial disease control officers and clinicians. This allows for *ad hoc* capturing of unusual events as identified by those being questioned – though this occurs on an opportunistic rather than systematic basis. Event-based reporting also comes from nongovernmental organizations, churches, prisons, media and other sources. The National Health Information System receives data from all 19 provinces and is supported by a strong radio network. However, the timeliness of reporting can vary, with reporting from the more remote locations sometimes taking weeks (or even months). Hence, while the system does provide useful information, it is not a true early warning system for public health purposes. Weaknesses include the lack of nil reporting and the absence of a national champion to drive the programme forward. A particular strength though is that event-based reporting can, and does, occur.

The Chairperson invited comments and questions:

Is the Guam system for information gathering time consuming? It was acknowledged that it can be, but tasks are shared among several staff, including a senior doctor who has a personal commitment to ensuring that good information is available to support public health services.

2.4.9 Panel discussion on national surveillance and response capacities
Facilitated by Dr Julie Hall and Dr Jacob Kool

(1) What has Fiji's experience been with incorporating private medical practitioners and facilities into the surveillance system? Fiji recognizes the importance of including private providers, but notes that it is not always easy. Reference was made to the dengue fever outbreak, during which multiple general practitioners were treating a number of cases. The information collected from private practitioners helped to confirm that an outbreak was occurring.

(2) In the Fiji surveillance system, is the reporting of communicable diseases and patient management information completely separate? As these two information streams serve different purposes, they are kept separate. For example, the patient information system is quite sophisticated and is geared towards administrative planning. Although in Samoa's experience, the collection of hospital data, such outpatient information, has been useful for some outbreak analysis.

Participants were asked: What do you find most useful about your existing surveillance system?

(1) Niue values its small-scale, simple and reasonably flexible system. Good case definitions and use of line-lists can be very important, for example, in detecting disease spikes.

(2) Guam considers the syndromic surveillance from the hospital to be effective, and will continue to encourage reporting from as many sources as possible, including private health providers.

(3) Papua New Guinea considers the informal arrangements for event reporting to be very useful, but recognizes that they could be improved by making them more systematic.

(4) Fiji would like to maintain its track record of innovation and improvements in recent years in order for the system to continue to evolve.

(5) Cook Islands wants to "future-proof" its systems to be able to deal with threats like SARS. The key to achieving this will be strengthening human resources and ensuring the functionality of basic public health capacities.

(6) Tonga would like to keep the ability of its system to detect syndromes in the community as early as possible, the capacity to investigate and verify events, and the protocols to respond.

(7) Palau wants to maintain its simple "telephone tree" to inform the next person in the chain, so that reporting and information sharing are second nature

(8) American Samoa noted that the workforce is the vital component of the surveillance system, so retaining key staff with the skills and motivation is paramount.

(9) How can one improve engagement by clinicians in surveillance systems, particularly practitioners working in private facilities? Even when the notification of certain diseases is mandated by law, involving clinicians is not always easy. One approach is to identify supportive individuals and opinion-leaders in the sectors concerned, and then work to cultivate a relationship with them – collaborate with them, share information about the value of providing timely and good quality data, and encourage them to persuade their peers to contribute to surveillance activities. Another suggestion is to provide training on surveillance systems to clinicians as part of their professional development and to ensure orientation programmes for new clinical staff include reference to the important part that they play in public health surveillance. Another approach is to set up a liaison person, with (or through) whom issues can be raised and concerns resolved.

(10) If a dispute about IHR (2005) arose between Member States, which court would they go to? If there is a dispute between Member States, they should make every effort to resolve the matter between them. Where a disagreement cannot be resolved between the parties concerned, then it can be submitted to the Director-General of WHO for assistance. Member States may also agree to arbitration (refer Article 56, settlement of disputes, for further information).

2.5 Session Four: Surveillance and response (continued)

The Chairperson requested the participants to remain focused on the implementation of their country plans, to include appropriate financial planning and to recognize that strengthening their workforce is one of the most effective ways to support public health programmes.

2.5.1 WHO Guide to Establishing an Event-based Surveillance System
Amy Cawthorne, WHO Western Pacific Regional Office

It is clear that many countries already have elements of event-based surveillance as part of their national surveillance framework. It is also important to remember that event-based surveillance does not replace or supersede traditional indicator-based surveillance such as notifiable diseases and laboratory reporting. Whatever names are given to the various surveillance strategies, they each have strengths and weaknesses and operate most effectively when used in combination. Simply stated, surveillance ensures that relevant data are available to inform timely investigation, assessment and response. A link between surveillance and the response function is particularly vital, as otherwise surveillance is just an interesting academic exercise.

Event-based surveillance involves capturing unstructured reports from a wide range of information sources. It can include informal channels, such as "rumour surveillance" from community leaders, the media, volunteers and reports from NGOs, as well as more formal systems such as reports from government agencies or "astute clinicians". The reporting methods might also be different from the routine weekly or monthly indicator-based surveillance. For example, information may come via telephone, text messaging, radio, etc. and can, and should, occur at any time – i.e. as soon as possible. Event-based surveillance information should be analysed in conjunction with other available data, including laboratory and indicator-based surveillance, where available. If reports from any source suggest that a public health risk may be present, or that an event appears unusual or unexpected, then a risk assessment should be performed immediately. Verification processes should be initiated by way of further investigation and, where appropriate, preliminary response measures initiated. Feedback should also be provided to those who report an event, so they can see how the information they have provided influenced the outcome and that their contribution is valued. Results generated from event-based surveillance should be included in surveillance bulletins, along with data from other more traditional surveillance methods.

2.5.2 Review of Pacific Hospital-Based Active Surveillance
Dr Wang Xiaojun, WHO, South Pacific

The Pacific Hospital-Based Active Surveillance system was initiated in 1997 under the PPHSN. This system clarifies who should report what, to whom, how and when. The system has five core features: sentinel, syndromic, *active*, sensitive and simple. It includes monthly nil reporting and specifies that the reporting of cases should occur urgently (i.e. within 24 hours) using a simple one-page form. The conditions targeted are acute flaccid paralysis (AFP are a group of diseases), acute fever and rash (targeting polio, measles and rubella in particular) and neonatal tetanus. Data are reported by more than 200 physicians in 58 hospitals to national coordinators in 20 Pacific countries, who then forward the data to WHO/SPC. Coordinators are in place at the hospital and national level to ensure quality control for the information provided and to follow up if the reports are delayed or incomplete. The WHO coordinator sends out a monthly e-mail reminder to the national coordinators, and produces a summary via PacNet. WHO can also provide technical advice, if required, for example, on the transport of specimens and laboratory confirmation.

This system has proved helpful in a number of disease events, including a measles outbreak in Fiji in February 2008. However, it still has some weaknesses – a rubella outbreak in 2003 was first thought to be measles. With no cases of polio reported for 20 years and very few cases of measles, interest in the system is waning. However, it is still important to provide support and training to national coordinators and to manage the turnover of hospital coordinators. The system must be kept simple and practical, and the active nature of the reporting must be maintained.

2.5.3 Review of the Pacific Public Health Surveillance Network
Dr Jacob Kool, WHO, South Pacific

The Pacific Public Health Surveillance Network (PPHSN) is a voluntary network created in 1996 through collaboration among PICs, WHO and SPC. It prioritizes outbreak-prone diseases with serious public health impacts, such as cholera, dengue, influenza and measles. Other diseases have been added, including AFP and SARS. Membership comprises 22 Pacific island Ministries of Health and a number of training institutes and laboratories. The Network includes a coordinating and governance body and a focal point for contact purposes. The three main components are PacNet, LabNet and EpiNet:

(1) PacNet is an e-mail list server, coordinated by SPC, for sharing alerts and advice – it is simple, fast and widely used by PICs for information sharing. PacNet also provides a platform for a surveillance bulletin, training and technical support including standards and guidelines. Because staff turnover can be problem for some PICs, the fact that PacNet is easy to use makes it accessible for new staff. One disadvantage is that, on occasion, there can be reluctance to share potentially sensitive information with such a wide network. Hence, PacNet-restricted was developed. There is also the need to ensure that information sharing via PacNet, as helpful as it is, is not seen as an alternative to the obligations of Member States under IHR (2005) to notify certain events directly to WHO.

(2) LabNet supports public health laboratories in the Pacific, e.g. by linking level 1 laboratories and other reference laboratories and providing technical advice on issues such as the transport of specimens.

(3) EpiNet provides a network of outbreak response teams and ready access to a pool of regional expertise, as it puts public investigators in touch with their counterparts in other PICs, for example, for communications and training purposes.

It was noted, however, that the PPHSN itself does not undertake surveillance, i.e. the Network does not analyse data and actively feed the results into verification, risk assessment and response activities. Rather, the PPHSN supports various processes under IHR (2005), including promoting collaboration, regional information sharing and capacity-building, but ultimately they are different frameworks developed for different purposes.

2.5.4 Introduction to group discussion
Dr Zhou Weigong, WHO Western Pacific Regional Office

Given the significant progress PICs have made with their workplans for IHR-APSED implementation, the next steps are to give priority to strengthening event detection, risk assessment and response capacities, particularly at the regional level. Given that communicable diseases do not respect national borders, an outbreak in one location may well pose a threat to the wider region. For this reason, all countries need to have confidence in their ability, and the ability of others, to detect and manage significant public health events. Gaps identified to date include the capability of NFPs to perform their various functions and national leadership in support of local and border-based surveillance and response capacities. There are regional systems in place in the Pacific, such as the hospital-based active surveillance system and PPHSN, but these cannot meet all the requirements of the region.

Participants were divided into three groups to discuss eight questions. Feedback from the groups was consolidated and is summarized below for each question.

(1) What types of information would your country need from other countries to ensure health security in your own country?

A clear consensus emerged that countries need to know about events or exposures that could pose a serious risk to public health. In particular, they would want to be informed about what is known about the event:

(1) How many cases?

(2) What are the symptoms?

(3) Are the cases suspected or confirmed?

(4) Where the event is occurring? (For example, an event occurring on a remote island, rather than near a major port, could make quite a difference to their assessment of the situation.)

Countries would also want to know what response measures have been implemented, including measures at the border. It is also important to know what information has been provided to the media – to assist with consistency in risk communication. Preliminary reporting should occur early, e.g. via PacNet. Early reporting may need to stress the provisional nature of the information available, for example, "a possible outbreak in location 'x', with general symptoms of 'y' and 'z', and further details expected in 3–4 days..." A template for putting such reports on PacNet might be useful.

Countries could provide advance warning of mass gatherings or similar events that involve large numbers of travellers, and therefore pose a potential risk for the spread of disease.

The list of Pacific NFPs should be kept up to date and contact details should be clarified. For example, in the case of Guam, should others contact Guam or USA.

Information sharing on border health protection practices would also be useful, for example, what level of ship inspection is undertaken at which ports?

Countries should share the sort of information that they themselves would want, or expect, to hear from their neighbours.

(2) How would you like to receive such information?

For events where urgency is warranted, active communication, via the National IHR Focal Point, using phone or e-mail is preferred. In more general terms, use PacNet for wider circulation throughout the region.

Contact points such as the NFP should take responsibility for in-country dissemination of information, for example, passing on relevant information about alerts received via PacNet.

Be mindful of language differences. Keep the information simple.

Do not be afraid to use informal communication channels, with known contacts.

(3) Would your country be able and/or willing to share such information with others?

(4) What are the main impediments to information sharing on outbreaks in the Pacific?

Participants reminded themselves that we are all obliged by IHR (2005) to share information.

It was noted that concerns about tourism or economic impacts can create a disincentive to information sharing.

Ministries of health could decide to make it a matter of policy to share such information. For example, information on pre-agreed diseases (possibly with pre-agreed thresholds) must be shared, e.g. dengue, malaria. If set in advance, this policy may help to overcome impediments to disclosure.

Participants were reminded they could use PacNet-restricted for more sensitive information sharing, for example, for provisional alerts.

If information is restricted, it should not be used publicly without the agreement of the country concerned. For example, approval would be required to provide precautionary information to travellers.

Be mindful that certain diseases, such as typhoid, are especially sensitive in some countries, but even in these sorts of situations information sharing can still important, for example, to assist with coordinated risk communication.

(5) Is there a need for a routine reporting system of priority communicable diseases in the Pacific (in addition to the immediate reporting of outbreaks)?

Yes, but it may be desirable to start with a relatively modest reporting regime of agreed diseases or significant events, and if this works well, then consider developing it further.

One of the benefits would be that such reporting would help with orienting new staff to the wider disease picture in the region. It would also provide baseline information to help with risk assessments. Even nil reporting can help with this, in providing confidence about health status *and* in the ongoing operation of surveillance systems.

Reporting to whom? Will there be feedback? What happens if reporting lapses? These questions may be raised by Ministers and would need to be resolved, if pursued.

While desirable, funding constraints, workforce shortages and other priorities may all reduce the likelihood of such routine reporting.

The quarterly reporting bulletin associated with PacNet could be a means of sharing information about the effectiveness of response measures

Routine reporting of priority communicable diseases should definitely take place in-country, but there may be some sensitivity about sharing this information internationally. However, some countries, such as Guam and New Caledonia, are already doing it. Reporting has not resulted in negative consequences – and in fact is seen as a positive.

(6) In your view, what should WHO do to assist and conduct timely risk assessments for events with national and regional concern, to meet IHR (2005) requirements?

Training, training and more training. WHO and SPC should conduct training and promote consistent approaches in relation to simple SOPs for priority diseases.

Training could cover the 5 + 1 areas of the APSED (plus PoEs). It should be generic to all risks and build on existing programmes, for example, so it can easily be woven into pandemic preparedness.

Tokelau requested assistance with the IHR-APSED capacity assessment.

In-country training is preferable, as it can reach more staff.

WHO should prepare a checklist for risk assessments, including how to assess unusual events or those of unknown origin.

(7) How can PacNet and/or PPHSN be used to facilitate information sharing on outbreaks (for example, dengue fever)?

Once an outbreak is over, a report should be put on the website or distributed via e-mail so that others can learn from the experience.

The website should have a map of the Pacific with "click on" links to historical and prevalence information as well as current public health events.

(8) How can PPHSN (e.g. EpiNet teams) and other partners be mobilized to support coordinated responses to significant outbreaks and public health events, when necessary?

WHO and SPC should collaborate to assist PICs in outbreak response and coordinate with PICs in relation to providing training during outbreak investigations and responses.

In addition to early information sharing, including technical advice and guidance, there can also be a need to help coordinate or provide direct operational support on the ground to help sustain a response over time.

Be prepared to ask for support from EpiNet teams – this can benefit the country experiencing the outbreak, and also provide a learning opportunity for all concerned.

Partners can provide support for preparing outbreak reports after events to consolidate the lessons and experiences gained.

General comments

Animal health is the "front line" for many human health threats, and it would be desirable to involve this sector in further meetings. Also, since there is very little animal health capacity in the Pacific, anything to build this capacity and engage them in these sorts of meetings would be mutually advantageous. Meeting participants were encouraged to build closer relationships with animal health stakeholders upon their return home and to regularly exchange surveillance information with animal health colleagues at the national level, if this is not already occurring.

It was noted that SPC is promoting collaboration between animal and human health staff, through both training and information sharing.

2.5.5 Closing remarks

The Chairperson, Dr Josephine Herman, thanked the participants, WHO, SPC, AusAID and all those who contributed to the meeting. She noted that considerable progress has been made with reviewing and strengthening core public health capacities and that while a number of challenges remain, the region appears to be on track to achieve implementation by mid-2010.

Dr Tom Kiedrzynski, Head of Public Health Surveillance and Communicable Disease Control, SPC thanked Cook Islands for the warm welcome and for being such generous hosts. He noted that SPC has two main lines of activity – first, to act as the secretariat for the PPHSN, and second, to support the PRIPPP, which is being used as a springboard for general capacity-building. As such, SPC activities contribute directly to APSED and IHR (2005) objectives. He expressed his goodwill for the participants in their endeavours to further develop core capacities for surveillance, assessment, response and reporting.

Dr Kevin Palmer, WHO Representative, noted that while the meeting had not solved all the problems, that recent momentum has been maintained. He said that communication, within and between countries, will continue to be the single most important priority. This applies to both routine interactions that occur on a day-to-day basis, but will be especially important in the management of major public health events. In a similar vein, WHO, SPC and other regional partners must continue to communicate with each other as well as with Pacific island countries and areas, to ensure that information needs are met.

The Deputy Prime Minister and Minister of Health for Cook Islands, the Honourable Sir Terepai Maoate KBE (MD), noted that regional development provides an important context for health policy and capacity-building, and that both economic development and health services planning benefit from collaborative approaches. Sir Terepai acknowledged the contribution made by Dr Palmer to the region over many years and wished him a happy retirement. He thanked Dr Kasai and WHO for arranging the meeting and noted that Dr Kasai's presence had reassured him of WHO's continued commitment to the Pacific region. He expressed his appreciation to Dr Tom Kiedrzynski for SPC's continuing and constructive role in the Pacific. He thanked New Zealand for supporting Cook Islands and this meeting. He also noted the major contribution that Dr Li Ailan had made to the smooth running of the meeting. He thanked AusAID for their continued support. He acknowledged Dr Josephine Herman's strong leadership both in the Cook Islands Ministry of Health and in chairing this meeting. He also noted the contribution that all the participants had made to the meeting. He commented that while we might take great care, and even agonize, over the detailed wording of the conclusions and recommendations, what matters even more is what we have learnt, our commitment to take that back home and what we then do with that knowledge and commitment. We are privileged with the responsibility of having the ability to make real gains in health services and to help our communities to improve health outcomes. The meeting's findings, and the legislation and treaties that guide our work are, of course, important, but we still have to make a difference with what we do. He then declared the meeting closed.

3. CONCLUSIONS AND RECOMMENDATIONS

3.1 Main findings and conclusions

3.1.1 General progress

(1) Considerable progress has been made towards IHR-APSED implementation, in particular, completion of capacity assessment and work plan development in the Pacific. Fourteen countries have conducted an assessment of national core capacity and 10 have developed a national plan of action.

(2) All the National IHR Focal Points (NFP) in the Pacific have been designated and are carrying out functions required by IHR (2005). Challenges remain regarding establishing NFP operating procedures and ensuring 24 hour / 7 day accessibility to the NFP. In addition, there are outdated NFP contact details, and in some cases limited NFP capacity to manage acute public health events.

(3) Emphasis has been placed on, and actions taken to use, APSED tools as a common framework to strengthen national capacities to meet IHR obligations in regards to all emerging diseases and acute public health events, in Pacific island countries and areas (PICs), including pandemic influenza.

3.1.2 IHR event-related communications

(1) The focus of the WHO system for managing acute public health events is to ensure prompt detection, risk assessment and rapid response. Early provision of information is the key to timely risk assessment and effective control.

(2) Participants recognized the importance of early and informal consultation of any suspicious events, timely information sharing, and the need for in-country capacity to support decision-making and notification processes. Participants also noted the variable duration and complexity in gaining approval for IHR official notification and the need to address this.

(3) There is the need to clarify communication mechanisms available for IHR events, in particular:

(a) consultation (Article 8) and risk assessment (WHO);

(b) technical advice, assistance and support (WHO, SPC, US CDC, etc.);

(c) formal notification of events that may constitute a potential public health emergency of international concern (Article 6) (WHO IHR contact point);

(d) information sharing among PICs (PacNet and IHR Event Information Site)

3.1.3 IHR-APSED capacity assessment and workplan

(1) Common gaps in IHR-APSED core capacity exist within PICs national health systems. The challenges of implementing IHR-APSED action plans include constraints in human and financial resources, competing priorities, variable linkages with animal health, legislative issues, limited availability and use of guidelines and standard operating procedures (e.g. SOPs for risk communication) and gaps in training.

(2) Strengthening workforce capacity should include the development and implementation of comprehensive programmes and requires training across all functional areas, in particular surveillance and response, risk assessment, outbreak investigation, and risk communication. IHR-APSED capacity-building opportunities should build on existing progress and use resources available under the Pacific Regional Influenza Pandemic Preparedness Project (e.g. infection control, animal health, legal support and exercises) WHO and other partners.

3.1.4 National surveillance and response systems

(1) Early warning and response systems are required to comply with IHR (2005). Strong leadership and a skilled workforce are critical to ensure that surveillance and response systems are effective and sustainable. Surveillance systems should be simple and build on existing systems.

(2) Timely feedback reporting is essential to build and sustain relationships between clinical and public health practitioners as well as animal health practitioners. Surveillance must be linked to response and action, including policy and practice.

(3) There is a need for regional and in-country training on outbreak investigation and response. Participants were provided an overview of the principles of outbreak investigation and response and understand that outbreak investigation can be simple – person, place and time.

3.1.5 Regional mechanisms for risk assessment, information sharing and response

(1) There is a need to further strengthen regional-level collaborative mechanisms to support systematic outbreak/event detection, risk assessment, information sharing and response, and between and within human and animal health systems. This will contribute to improved Pacific regional public health security and facilitate compliance with IHR (2005).

(2) Existing Pacific regional surveillance and response systems and networks, including the Hospital-Based Active Surveillance (HBAS) and the Pacific Public Health Surveillance Network (PPHSN) play an important role in the Pacific and should continue to be strengthened.

3.2 Recommendations

3.2.1 IHR event-related communications

(1) National IHR Focal Points' capacities for IHR event-related communications for managing acute public health events (e.g. risk assessment, decision-making and notification processes) should be strengthened through:

(a) appropriate training of key staff; and

(b) regular testing of IHR communication system capabilities at the national and regional level.

(2) WHO, SPC and partners should continue to work together to provide guidance for event-related communications for risk assessment, technical support, official notifications and information sharing among Pacific island countries and areas (PICs).

3.2.2 IHR-ASPED assessment and workplan

(1) All national workplans should be completed no later than 15 June 2009.

(2) PICs, WHO and SPC should work cooperatively and collectively to ensure effective implementation of the national plans through the provision of adequately resourced (human and funding) and structured workforce development and responsive health systems.

(3) PICs are encouraged to capitalize on relevant existing projects, for example, PRIPPP, US-supported public health emergency preparedness, to strengthen the APSED programme areas, i.e. surveillance and response, laboratory, zoonoses, infection control and risk communication. PICs should also strengthen core capacities at points of entry

(4) PICs are encouraged to continue engaging other sectors and government agencies as appropriate, including animal health, in implementing their IHR-APSED workplans, so as to ensure a comprehensive, multisectoral approach to coordination and capacity-building.

3.2.3 National surveillance and response

(1) PICs should develop and/or strengthen simple and flexible syndromic and event-based surveillance systems for early warning purposes, to complement notifiable disease reporting and laboratory-based surveillance.

(2) PICs should establish and/or strengthen a central public health surveillance and response unit and establish a duty roster for IHR-required event communications.

(3) PICs should produce and disseminate a regular (weekly or monthly) surveillance bulletin for epidemic-prone diseases, which incorporates surveillance from all available sources, and encourages immediate reporting of all potentially serious events.

(4) WHO, SPC and PICs should develop, by February 2009, a comprehensive training plan to address priority workforce needs required for the effective management of national surveillance and response units. This process should include a rapid analysis of prior training conducted regionally and in-country during the last year.

3.2.4 Pacific regional event risk assessment, information sharing and response

(1) WHO, in collaboration with SPC and other partners, should benchmark core requirements of all national surveillance and response systems and strengthen existing regional collaborative systems in the Pacific for outbreak/event detection, risk assessment, response and information sharing, in order to contribute to Pacific public health security and comply with IHR (2005) requirements.

(2) In order to continue the momentum for meeting the target for IHR (2005) core capacity requirements by 2010 in the region, WHO should organize a follow-up meeting of Pacific National IHR Focal Points, no later than June 2010, at which PICs should report progress made towards IHR-APSED implementation.

ANNEX 1

OPENING REMARKS
by WHO Representative in Samoa
on behalf of Dr Shigeru Omi,
WHO Regional Director
for the Western Pacific Region

Second Meeting of
Pacific National Focal Points for the
International Health Regulations (2005)
Rarotonga, Cook Islands
14-16 October 2008

HONOURABLE DEPUTY PRIME MINISTER, SIR TEREPAI MAOATE,

DISTINGUISHED PARTICIPANTS,

ADVISERS, COLLEAGUES

LADIES AND GENTLEMEN.

On behalf of Dr Shigeru Omi, WHO Regional Director for the Western Pacific, I would like to thank the Ministry of Health in Cook Islands for hosting the Second Meeting of the Pacific National Focal Points for the International Health Regulations, known as the IHR. This is a vitally important meeting to facilitate effective IHR implementation in the Pacific.

I am very pleased to see such full participation from countries and areas. I would like to welcome our colleagues from the Secretariat of the Pacific Community, other partner agencies and our colleague from WHO Geneva. Your participation and support clearly demonstrates the spirit of joint efforts and collective actions to ensure pacific public health security through IHR implementation.

The newly revised IHR have been in force since June last year and are legally binding on all WHO Member States. These Regulations set out a number of obligations for both countries and WHO in managing acute public health threats.

While Member States are required to develop national capacity for surveillance and response and to notify WHO of any potential public health emergency of international concern, WHO also has the mandate to conduct public health risk assessments and coordinate regional and international responses to significant outbreaks and public health events.

The IHR require WHO to work closely with Member States to develop, strengthen and maintain national, regional and international systems that are capable of early detection, timely assessment and rapid response.

Annex 1

The Asia Pacific Strategy for Emerging Diseases, know as APSED, is currently being implemented as a regional tool for countries to meet the IHR core capacities.

I understand that you had a very successful first meeting of Pacific National IHR Focal Points which was held in October 2007, Nadi, Fiji. The meeting discussed and identified the important action items for implementation of the IHR and the APSED. Over the past year, tremendous progress has been made towards implementing the first meeting's recommendations. My colleagues have informed me that all countries have now completed a national core capacity assessment and as a result, 10 countries have developed national action plans. I would like to congratulate all of you for such big achievement. Let's maintain this momentum. Let's continue to work together to address the challenges being faced in the Pacific. While we deserve to celebrate the progress made over the past 1-2 years, there are still some remaining questions that will be at the centre of your discussions over the next three days:

Do all the countries have the required capacity in place right now for public health detection, risk assessment and rapid response? Are we on the right track to implement national plans for core capacity strengthening?

Are the National IHR Focal Points able to carry out effective IHR event related communications?

If not, how can we collectively address these gaps?

I think you will agree with me that there are indeed some important gaps in existing national systems in the Pacific. For example, most countries still do not have adequate technical and resource capacity for timely outbreak identification, risk assessment and rapid response.

Building sustainable long-term in-country capacity will take some time but while we are doing that there is an immediate need to ensure that there is an effective mechanism in place to ensure Pacific regional public health security. Such a mechanism will allow all Pacific Island Countries and areas together with WHO, SPC and other partners to work in a coordinated and collaborative way, to ensure that outbreaks and public health events can be detected, assessed and controlled in a timely manner.

While I am sure you are very familiar with the IHR obligations, please allow me to re-emphasize a few key components of the IHR that are especially relevant to the Pacific.

The IHR aims at preventing international spread of diseases while avoiding unnecessary interference with international travel and trade and they emphasize the importance of taking effective action when problems are still small and at local levels.

I would therefore like to strongly encourage all the Pacific countries and areas to keep WHO informed about any suspicious disease outbreak or event at the local or national level and involve us in determining appropriate responses. This is vitally important because early detection and rapid response can often prevent a situation from reaching a level requiring regional or international action.

Annex 1

This meeting provides a unique opportunity to enhance communications about major threats to the healthy security of the unique part of the world in which we live. It is important that each of you contribute to enhancing the culture of sharing information so in the future we will be better prepared to fight against emerging disease and other public health threats.

Once again, my sincere thanks to all of you for coming to this important meeting. I would like to express our sincere appreciation to his Excellency the Deputy Prime Minister, Sir Terepai Maoate and your management team for taking your busy time to join us here this morning. I also want to thank Dr Josephine Aumea Herman, Director of Community Health Services her strong support to this meeting.

With your support and active participation from everyone in this room, I am confident that you will have a successful meeting.

Thank you!

ANNEX 2

PROGRAMME OF ACTIVITIES

Day 1 – Tuesday, 14 October 2008

08:00 - 08:30	Registration
Opening Session	
08:30 - 08:40	Opening remarks *-WHO Representative in Samoa*
08:40 - 08:50	Welcome speech *- Ministry of Health, Cook Islands*
08:50 - 09:10	Meeting objectives, expected outcomes and agenda *- Dr Takeshi Kasai, Responsible Officer, CSR/WPRO*
09:10 - 09:30	Nomination of chair, vice-chair and rapporteur Administrative announcement *- Dr Jacob Kool, WHO South Pacific*
09:30 - 09:50	Group photo
09:50 - 10:30	*Coffee Break*
Session One:	**Update of IHR/APSED implementation**
10:30 - 11:10	Implementation of the International Health Regulations: A global update *- Dr Max Hardiman, Medical Officer, WHO/HQ*
11:10 - 11:50	IHR/APSED implementation progress in the Asia Pacific Region *- Dr Takeshi Kasai, Responsible Officer, CSR/WPRO*
11:50 - 12:00	Questions and clarifications
12:00 - 13:30	*Lunch Break*
Session Two:	**IHR event related communications**
13:30 - 13:50	WHO's operating procedures for managing acute public health events *- Dr Takeshi Kasai, Regional Adviser, CSR/WPRO*
13:50 - 14:10	Review of IHR event communications in the Western Pacific Region *- Dr Li Ailan, Medical Officer, CSR/WPRO*
14:10 - 14:20	Questions and clarifications

Annex 2

14:20 - 15:10	Country experience in IHR event communications (1) MDR-TB outbreak detection, risk assessment, notification and response *- Federated States of Micronesia* (2) Dengue outbreak detection, risk assessment, notification and response *- Fiji*
15:10 - 15:30	Questions, clarifications and discussions
15:30 - 16:00	*Coffee break*
16:00 - 16:30	Outbreak response in the Pacific *- Dr Boris Pavlin, Epidemiologist, WHO Western Pacific*
16:30 - 17:00	Break-out session (3 groups): Use of the IHR Decision Instrument
18:30	Reception

Day 2 – Wednesday, 15 October 2008

Session Three:	**IHR-APSED assessment and country workplan in the Pacific**
08:30 - 08:40	Wrap-up of Day 1 *- by Rapporteur*
08:40 - 09:00	Overview of Pacific IHR-APSED capacity assessments and workplans *- Dr Zhou Weigong, Medical Officer, CSR/WPRO*
09:00 - 09:10	Questions and clarifications
09:10 - 10:00	Group 1: Country capacity assessment and workplan (10 minutes/each) Group 2: Country capacity assessment and workplan (10 minutes/each)

Annex 2

10:00 - 10:30	*Coffee break*
10:30 - 12:00	Group 1: Country capacity assessment and workplan (continue...)
	Group 2: Country capacity assessment and workplan (continue...)
12:00 - 13:00	*Lunch Break*
Session Four:	**Surveillance and response**
13:00 - 13:10	Highlights of IHR/APSED requirements on surveillance and response *- Dr Julie Hall, Medical Officer, CSR/WPRO*
13:10 - 13:30	Strengthening national surveillance capacity in the Pacific *- Dr Jacob Kool, Epidemiologist, WHO South Pacific*
13:30 – 13:50	Setting up an early warning and response system in the Solomon Islands *- Dr Tom Kiedrzynski, Epidemiologist, SPC*
13:50 – 14:10	Development of a syndromic surveillance and outbreak manual: the Tuvalu experience *- Dr David Durrheim, University of Newcastle, Australia*
14:10 - 14:30	Questions and clarifications
14:30 - 15:00	*Coffee Break*
15:00 - 15:40	Country presentations on surveillance and response (10 minutes/each)
	(1) Guam surveillance and response system *- Guam(USA)*
	(2) National surveillance system in Niue *- Niue*
	(3) National surveillance system in Fiji *- Fiji*
	(4) National surveillance system in Nauru *- Nauru*
15:40 - 17:00	Questions, clarifications, and discussions on national surveillance and response systems

Annex 2

Day 3 – Thursday, 16 October 2008

Session Four:	**Surveillance and response (*cont.*)**
08:30 - 08:40	Wrap-up of Day 2 - *by Rapporteur*
08:40 - 09:00	WHO guide to establishing event-base surveillance system - *Amy Cawthorne, Epidemiologist, CSR/WPRO*
09:00 - 09:15	Review of existing Pacific Hospital-Based Active Surveillance (HBAS) - *Dr Wang Xiaojun, Technical Officer, WHO South Pacific*
09:15 - 09:30	Review of Pacific Public Health Surveillance Network (PPHSN) - *Dr Jacob Kool, Epidemiologist, WHO South Pacific*
09:30 - 09:40	Briefing introduction on group discussion - *Dr Zhou Weigong, Medical Officer, CSR/WPRO*
09:40 - 10:10	*Coffee Break*
10:10 - 12:00	Group discussion (3 groups) - Issues and approaches for strengthening pacific regional outbreak/event detection, assessment and response to meet the IHR requirements
12:00 - 13:30	*Lunch Break*
Session 5:	**Conclusions and next steps**
13:30 – 14:10	Feedback of group discussions (15 minutes/each group)
14:10 - 14:30	Questions and clarifications
14:30 - 15:30	Meeting conclusions and recommendations - *by Chair*
15:30	Closing remarks
	Coffee break

ANNEX 3

LIST OF PARTICIPANTS, CONSULTANT, TEMPORARY ADVISERS, OBSERVERS AND SECRETARIAT

1. PARTICIPANTS

AMERICAN SAMOA	Mr Fale Uele, Health Information System Administrator, Department of Health, American Samoa Government, Pago Pago 96799. Fax No.: (684) 633 5379. Tel No.: (684) 633 4606. E-mail: fsuele@yahoo.com
COOK ISLANDS	Dr Josephine Hermand, Director of Community Services, Ministry of Health, Avarua, Rarotonga. Fax No.: (682) 29100. Tel No.: (682) 29664. E-mail: j.herman@health.gov.ci.
FIJI	Dr Eric Vilsoni Rafai, National Adviser – Communicable Diseases, Ministry of Health, Women and Social Welfare, Mataika House, Building 30, Suva. Fax No.: (679) 3320344. Tel No.: (679) 3320066. E-mail: eric.rafai@health.gov.fj.
GUAM	Dr Lourdes Duguies, Communicable Disease Control III Supervisor, Department of Public Health and Social Services, 123 Chalan Kareta, Mangilao 96913-6304. Fax No.: (671) 734 2103 / 1475. Tel No.: (671) 735 7154 / 7142. E-mail: lourdes.duguies@dphss.guam.gov; lou82mph@yahoo.com
KIRIBATI	Dr Kenneth Tabutoa, Public Health Physician, Ministry of Health and Medical Services, P.O. Box 268, Bikenibeu (Nawerewere), Tarawa Fax No.: (686) 28152. Tel No.: (686) 28100. E-mail: rose_sanree@yahoo.com
FEDERATED STATES OF MICRONESIA	Dr Joanes Sarofalpiy, Medical Director, Bioterrorism and Hospital Preparedness and Emergency Response, Department of Health and Social Affairs, P.O. Box PS-70, FSM National Government, Palikir, Pohnpei Fax No.: (691) 320 8460. Tel No.: (691) 320 8300/2619. E-mail: jsarofalpiy@fsmhealth.fm.
NAURU	Mr Vincent Scotty, Food Inspector, Ministry of Health, Government Offices, Yaren District, Central Pacific. Fax No.: (674) 4443105 (Attn: Mr Scotty, Health Dept). Tel No.: (674) 4443883. E-mail: vincent.scotty@nauru.gov.nr; vscotty2004@yahoo.com.
NEW CALEDONIA	Dr Martine Noel, Veille sanitaire et Contrôle sanitaire aux frontieres, Surveillance and Border Health Control, Service d'actions sanitaires - DASS NC, BP N4 – 98851, Nouméa cédex. Fax No: (687) 243 714 Tel No.: (687) 243 710/243 700. E-mail: martine.noel@gouv.nc.

Annex 3

NIUE	Mr Manila Nosa, Chief Public Health Officer, Niue Health Department, P.O. Box 33, Alofi. Fax No.: (683) 4265. Tel No.: (683) 4100. E-mail: mnosa@mail.gov.nu.
COMMONWEALTH OF THE NORTHERN MARIANA ISLANDS	Mr John Tagabuel, CNMI Environmental Health Officer, Department of Health, Commonwealth Health Centre, P.O. Box 500409, Saipan, 96950. Fax No.: (670) 236 8700. Tel No.: (670) 664 4870. E-mail: John.Tagabuel@gmail.com.
PALAU	Ms Pearl Lynn Marumoto, Administrator, Emergency Health Programme, c/o Ministry of Health, P.O. Box 6027. Koror 96940. Fax no: (680) 488 1211. Tel No.: (680) 488 6750. E-mail: p_marumoto@palau-health.net.
PAPUA NEW GUINEA	Mr Francis POSSY, Principal Legal Adviser, National Department of Health, P.O. Box 807, Waigani, National Capital District. Fax no: (675) 323 9670 / 301 3604. Tel No.: (675) 301 3616. E-mail: francis_possy@health.gov.pg
SAMOA	Ms Leilani MATALAVEA, Health Information and Communications Specialist, Ministry of Health, Private Bag, Motootlia, Apia Tel No. (685) 68 100. E-mail: leilanim@health.gov.ws. lani_matalavea@yahoo.com.au
TOKELAU	Ms Lisa Pou LISTER, Health Manager, Tokelau Health Department, Tokelau Apia Liaison Office, P.O. Box 865, Savalalo, Apia Fax No.: (685) 21761. Tel No.: (685) 20822 / 20823. E-mail : liza.kelekolio@lesamoa.net
TONGA	Dr Malakai 'AKE, Chief Medical Officer/Public Health, Ministry of Health, P.O. Box 59, Nuku'alofa. Fax No.: (676) 24 291. Tel No.: (676) 23 200. E-mail: drmalakaiake@gmail.com
TUVALU	Dr Stephen HOMASI, Director of Health, Ministry of Health, Funafuti. Fax No.: (688) 20832. Tel. No.: (688) 20765 E-mail: s.homasi@yahoo.com
VANUATU	Mr Viran TOVU, Manager for Environment Health, Public Health Department, PMB 009, Port Vila. Fax No.: (678) 22545. Tel No.: (678) 22512 or 776 3213. E-mail: vtovu@vanuatu.gov.vu

2. CONSULTANT

Mr Andrew FORSYTH, Team Leader (Public Health Legislation Review), Health & Disability Systems Strategy Directorate, Ministry of Health, P.O. Box 5013, Wellington, New Zealand Fax No.: (644) 816 2191. Tel. No.: (644) 816 4429. E-mail: andrew_forsyth@moh.govt.nz

Annex 3

3. TEMPORARY ADVISERS

Dr Tom KIEDRZYNSKI, Epidemiologist and Head, Public Health Surveillance and Communicable Disease Control Section, Public Health Programme, Secretariat of the Pacific Community, BP D5 98848, Noumea Cedex, New Caledonia. Fax No.: (687) 263 818. Tel. No.: (687) 260 143. E-mail: Tomk@spc.int; kiedrzynski@canl.nc.

Dr David DURRHEIM, Director Health Protection, Hunter New England Population Health and Professor of Public Health, University of Newcastle, Locked Bag 10, Wallsend, NSW 2287, Australia. Fax No.: (612) 4924 6048. E-mail :David.Durrheim@hnehealth.nsw.gov.au.

4. OBSERVERS/REPRESENTATIVES

GOVERNMENT OF COOK ISLANDS

Mr Charlie AVE, Public Health Inspector, Ministry of Health, PO Box 109, Rarotonga, Cook Islands. Fax No.: (682) 29100. Tel No.: (682) 29110. E-mail: c.ave@health.gov.ck

Mr Charlie CARLSON, Director of Emergency Management - Cook Islands, c/- Prime Minister's Office Private Bag, Rarotonga, Cook Islands. Fax No.: (682) 29602. Tel No.: (682) 29601. E-mail: ccarlson@emci.gov.ck.

Mr Charlie INGAUA, Public Health Inspector, Ministry of Health, PO Box 109, Rarotonga, Cook Islands. Fax No.: (682) 29100. Tel No.: (682) 29110. E-mail: c.ingaua@health.gov.ck

Mr William TARIPO, Acting Chief Health Inspector, Ministry of Health, P.O. Box 109, Rarotonga, Cook Islands. Fax No.: (682) 29100. Tel No.: (682) 29110. E-mail : w.taripo@health.gov.ck.

Mrs Elizabeth IRO, Quality Manager, Ministry of Health, P.O. Box 109, Rarotonga, Cook Islands. Fax No.: (682) 22670. Tel No.: (682) 22664. E-mail: e.iro@health.gov.ck.

Mrs Mata IROA, Laboratory Technician, Ministry of Health, P.O. Box 109, Rarotonga, Cook Islands. Fax No.: (682) 22670. Tel No.: (682) 22664. E-mail: m.iroa@health.gov.ck

Mrs Heather WEBBER-AITU, Director of Hospital Services, Ministry of Health, P.O. Box 109, Rarotonga, Cook Islands. Fax No.: (682) 22670. Tel No.: (682) 23106. E-mail: h.webberaitu@health.gov.ck

Mr Tiria RERE, Chief Livestock Officer, Ministry of Agriculture, P.O. Box 96, Rarotonga, Cook Islands. Fax No.: (682) 21881. Tel No.: (682) 28711. E-mail: tiria@agriculture.gov.ck.

Annex 3

	Ms Jaqui EVANS, Health Planner – Sanitation, Ministry of Health, P.O. Box 109, Rarotonga, Cook Islands. Fax No.: (682) 29100. Tel No.: (682) 29110. E-mail: j.evans@health.gov.ck
	Dr Tuaine UNUIA, Dental Officer, Ministry of Health, P.O. Box 109 Rarotonga, Cook Islands. Fax No.: (682) 29100. Tel No.: (682) 29312. E-mail: t.unuia@health.gov.ck.
SECRETARIAT OF THE PACIFIC COMMUNITY	Dr Narendra SINGH, Pandemic Influenza Preparedness and Training Specialist, SPC Suva Regional office, Private Mail Bag, Suva, Fiji. Fax No.: (679) 337 0021. Tel No.: (679) 337 0733. E-mail: NarendraS@spc.int
	Dr Seini KUPU, Pandemic Influenza Preparedness Specialist, SPC Headquarters, BP D5, 98848 Noumea Cedex, New Caledonia Fax No.: (687) 263818. Tel No.: (687) 262000 Ext. 238 E-mail: SeiniK@spc.int
	Dr James WANGI, Pandemic Influenza Preparedness Specialist (PNG), SPC – Secretariat of the Pacific Community, P.O. Box 3484, Boroko, National Capital District, Papua New Guinea. Fax No.: (675) 325 1820. Tel No.: (675) 638 8501. E-mail: JamesW@spc.int.
UNITED NATIONS SYSTEM INFLUENZA COORDINATION	Dr Koji NABAE, Avian and Human Influenza Regional Coordinating Officer, United Nations System Influenza Coordination (UNSIC) Asia Pacific Regional Hub, c/o UN OCHA Regional Office for Asia and the Pacific, Executive Suite, 2nd Floor, UNCC Building, Rajdamnem Nok Avenue, Bangkok, 10200 Thailand. Fax No.: 66 (0) 2288 1078. Tel No.: 66 (0) 2288 2429. E-mail: Nabae@un.org.

5. SECRETARIAT

Dr Takeshi KASAI (Responsible Officer), Regional Adviser, Communicable Disease Surveillance and Response, WHO Regional Office for the Western Pacific, Manila, Philippines. Fax No.: (632) 521 1036. Tel No.: (632) 528 9730. E-mail: kasait@wpro.who.int.

Dr Weigong ZHOU, Medical Officer for Influenza Surveillance, Communicable Disease Surveillance and Response, WHO Regional Office for the Western Pacific, Manila, Philippines. Fax No.: (632) 521 1036. Tel No.: (632) 528 9732. E-mail: zhouw@wpro.who.int.

Dr LI Ailan, Medical Officer (IHR), Communicable Disease Surveillance and Response, WHO Regional Office for the Western Pacific, Manila, Philippines. Fax No.: (632) 521 1036. Tel No.: (632) 528 9784. E-mail: lia@wpro.who.int.

Dr Julie HALL, Medical Epidemiologist, Communicable Disease Surveillance and Response WHO Regional Office for the Western Pacific, Manila, Philippines. Fax No.: (632) 521 1036. Tel No.: (632) 528 9828. E-mail: hallju@wpro.who.int.

Annex 3

Miss Amy CAWTHORNE, Epidemiologist, Communicable Disease Surveillance and Response WHO Regional Office for the Western Pacific, Manila, Philippines. Fax No.: (632) 521 1036. Tel No.: (632) 528 9917. E-mail: cawthornea@wpro.who.int.

Ms Katie Patricia HARRIGAN, Technical Officer (Communicable Diseases), Communicable Disease Surveillance and Response, WHO Regional Office for the Western Pacific, Manila, Philippines. Fax No.: (632) 521 1036. Tel No.: (632) 528 9918.
E-mail: harrigank@wpro.who.int.

Dr WANG Xiaojun, Technical Officer, Expanded Programme on Immunization, Office of the WHO Representative in the South Pacific, Level 4 Provident Plaza One, Downtown Boulevard 33 Ellery Street, Suva, Fiji. Fax No.: (679) 3234166 / 3234177. Tel No.: (679) 3234113.
E-mail: wangxia@wpro.who.int

Dr Kevin PALMER, WHO Representative, Office of the WHO Representative in Samoa, P.O. Box 77, Apia, Western Samoa. Fax No.: Fax No.: (685) 23 765. Tel No.: (685) 23 756.
E-mail: palmerk@wpro.who.int.

Dr Jacob KOOL, Epidemiologist, Office of the WHO Representative in the South Pacific, Level 4 Provident Plaza One, Downtown Boulevard, 33 Ellery Street, Suva, Fiji.
Fax No.: (679) 3300462. Tel No.: (679) 3304600. E-mail: koolj@wpro.who.int.

Dr Boris PAVLIN, Epidemiologist, World Health Organization, P.O. Box PS 70, Department of Health and Social Affairs, Palikir, Pohnpei, Federated States of Micronesia.
Fax No.: (691) 320 8796. Tel No.: (691) 320 2619. E-mail: pavlinb@wpro.who.int.

Dr Alex ROSEWELL, Epidemiologist, Office of the WHO Representative in Papua New Guinea, PO Box 5896 Boroko, NCD, Papua New Guinea. Fax No.: (675) 325 0568.
Tel No.:(675) 325 7827. E-mail: rosewella@wpro.who.int.

Ms Rosemary AH CHONG, Assistant, Office of the WHO Representative in Samoa, P.O. Box 77, Apia, Western Samoa. Fax No.: (685) 23 765. Tel No.: (685) 23 756.
E-mail: ahchongr@wpro.who.int

Dr Max HARDIMAN, Coordinator, International Health Regulations, Epidemic and Pandemic Alert and Response, World Health Organization, Geneva, Switzerland. Fax No.: (41 22) 791 4667. Tel No.: (41 22) 791 2572. E-mail: hardimanm@who.int