Second Pacific Immunization Programme Strengthening (PIPS) Workshop

Nadi, Fiji
8-12 May 2006
REPORT
SECOND PACIFIC IMMUNIZATION PROGRAMME STRENGTHENING WORKSHOP
Nadi, Fiji
8 - 12 May 2006

Convened by:
WORLD HEALTH ORGANIZATION
REGIONAL OFFICE FOR THE WESTERN PACIFIC
and
UNITED NATIONS CHILDREN'S FUND
PACIFIC OFFICE

Not for sale

Printed and distributed by:
World Health Organization
Regional Office for the Western Pacific
Manila, Philippines

September 2006
NOTE

The views expressed in this report are those of the participants of the Second Pacific Immunization Programme Strengthening Workshop and do not necessarily reflect the policies of the World Health Organization.

The Expanded Programme on Immunization, WHO Western Pacific Regional Office, would like to thank the Ministry of Health, Labour and Welfare of Japan for providing financial support for the meeting, including the production of this document.

Keywords:

Immunization programs – organization and administration, utilization / Mass immunization – organization and administration, utilization / Health policy / Communicable disease control / Pacific islands

This report has been printed by the Regional Office for the Western Pacific of the World Health Organization for the participants of the Second Pacific Immunization Programme Strengthening Workshop, which was held in Nadi, Fiji, from 8 to 12 May 2006.
The Second Pacific Immunization Programme Strengthening (PIPS) Workshop was convened in Nadi, Fiji from 8 to 12 May 2006, by WHO and the United Nations Children's Fund (UNICEF). Nineteen Pacific Island countries (PICs) sent national representatives to the workshop. In addition, representatives and observers from each of the co-organizing agencies attended the workshop: Australian Agency for International Development (AusAID), the United States Centers for Disease Control and Prevention (CDC), Japan International Cooperation Agency (JICA), New Zealand International Aid and Development Agency (NZAID) and the Secretariat of the Pacific Community (SPC).

Participants reviewed national immunization programme status within the context of regional and global developments, identified strategies to sustain and strengthen routine immunization programmes and assessed opportunities and strategies for introducing new and underutilized vaccines such as rubella and haemophilus influenzae type b (Hib). The Vaccine Independence Initiative (VII) status was also examined and discussed to ensure vaccine security, and coordination of technical and financial support from PIPS partner agencies for 2006-2007 was planned.

The workshop concluded that challenges still remain including the need to reach all children, introduce new vaccines, improve surveillance and sustain high population immunity. The recently endorsed Global Immunization Vision and Strategy (GIVS) and twin regional immunization goals for measles and hepatitis B were seen as providing direction for addressing these issues. The Expanded Programme on Immunization (EPI) can also serve as a structure for child survival to help achieve Millennium Development Goal 4, i.e., to reduce child mortality, particularly, by improving the proportion of one-year-old children immunized against measles. Increased political, financial and technical support within countries and from partners will be required. The meeting highlighted the assistance available through donor agencies through the PIPS coordinating mechanism.
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AD Syringe</td>
<td>Auto Disable Syringe</td>
</tr>
<tr>
<td>AFP</td>
<td>Acute Flaccid Paralysis</td>
</tr>
<tr>
<td>AFR</td>
<td>Acute Fever and Rash</td>
</tr>
<tr>
<td>AusAID</td>
<td>Australian Agency for International Development</td>
</tr>
<tr>
<td>CDC</td>
<td>United States Centers for Disease Control and Prevention</td>
</tr>
<tr>
<td>CRS</td>
<td>Congenital Rubella Syndrome</td>
</tr>
<tr>
<td>DTP</td>
<td>Diphtheria-tetanus-pertussis</td>
</tr>
<tr>
<td>EPI</td>
<td>Expanded Programme on Immunization</td>
</tr>
<tr>
<td>GIVS</td>
<td>Global Immunization and Vaccine Strategy</td>
</tr>
<tr>
<td>HBAS</td>
<td>Hospital-based Active Surveillance</td>
</tr>
<tr>
<td>HepB1</td>
<td>First Dose of the Hepatitis B Vaccine</td>
</tr>
<tr>
<td>HepB3</td>
<td>Third Dose of the Hepatitis B Vaccine</td>
</tr>
<tr>
<td>Hib</td>
<td>Haemophilus Influenzae Type B</td>
</tr>
<tr>
<td>HIV/AIDS</td>
<td>Human Immunodeficiency Virus / Acquired Immune Deficiency Syndrome</td>
</tr>
<tr>
<td>IATA</td>
<td>International Air Transport Association</td>
</tr>
<tr>
<td>IgM</td>
<td>Immunoglobulin M</td>
</tr>
<tr>
<td>JICA</td>
<td>Japan International Cooperation Agency</td>
</tr>
<tr>
<td>J-PIPS</td>
<td>Japanese support for Pacific Immunization Programme Strengthening</td>
</tr>
<tr>
<td>JRF</td>
<td>Joint Reporting Form</td>
</tr>
<tr>
<td>KAP</td>
<td>Knowledge Attitudes and Practice</td>
</tr>
<tr>
<td>MCV</td>
<td>Measles Containing Vaccine</td>
</tr>
<tr>
<td>MNT</td>
<td>Maternal and Neonatal Tetanus</td>
</tr>
<tr>
<td>MOH</td>
<td>Ministry of Health</td>
</tr>
<tr>
<td>mOPV</td>
<td>Monovalent Oral Poliovirus Vaccine</td>
</tr>
<tr>
<td>NT</td>
<td>Neonatal Tetanus</td>
</tr>
<tr>
<td>NZAID</td>
<td>New Zealand International Aid and Development Agency</td>
</tr>
<tr>
<td>OPV</td>
<td>Oral Polio Vaccine</td>
</tr>
<tr>
<td>ORI</td>
<td>Outbreak Response Immunization</td>
</tr>
<tr>
<td>PaCNET</td>
<td>Pacific Public Health Surveillance Network</td>
</tr>
<tr>
<td>PICs</td>
<td>Pacific Island Countries</td>
</tr>
<tr>
<td>PIPS</td>
<td>Pacific Immunization Programme Strengthening</td>
</tr>
<tr>
<td>RCC</td>
<td>Regional Certification Committee</td>
</tr>
<tr>
<td>Acronym</td>
<td>Description</td>
</tr>
<tr>
<td>---------</td>
<td>-------------</td>
</tr>
<tr>
<td>RCM</td>
<td>Regional Committee Meeting</td>
</tr>
<tr>
<td>RED</td>
<td>Reaching Every District</td>
</tr>
<tr>
<td>SIA</td>
<td>Supplementary Immunization Activity</td>
</tr>
<tr>
<td>SPC</td>
<td>Secretariat of the Pacific Community</td>
</tr>
<tr>
<td>SRCC</td>
<td>Subregional Committee for the Certification of Poliomyelitis Eradication in Pacific Island Countries and Areas</td>
</tr>
<tr>
<td>TBA</td>
<td>Traditional Birth Attendant</td>
</tr>
<tr>
<td>TT</td>
<td>Tetanus Toxoid</td>
</tr>
<tr>
<td>UNICEF</td>
<td>United Nations Children's Fund</td>
</tr>
<tr>
<td>VAR</td>
<td>Vaccine Arrival Report</td>
</tr>
<tr>
<td>VDPV</td>
<td>Vaccine Derived Polio Virus</td>
</tr>
<tr>
<td>VII</td>
<td>Vaccine Independence Initiative</td>
</tr>
<tr>
<td>VIDRL</td>
<td>Victorian Infectious Diseases Laboratory</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organization</td>
</tr>
<tr>
<td>WPRO</td>
<td>Western Pacific Regional Office</td>
</tr>
</tbody>
</table>
CONTENTS

1. INTRODUCTION ................................................................................................................. 1
  1.1 Objectives ..................................................................................................................... 1
  1.2 Participants .................................................................................................................... 1
  1.3 Opening ceremony ........................................................................................................ 1
  1.4 Appointment of Chairperson, Vice-Chairperson and Rapporteur ......................... 2

2. PROCEEDINGS .................................................................................................................... 3
  2.1 Workshop overview ...................................................................................................... 3
  2.2 Overview of the EPI ..................................................................................................... 3
  2.3 2005 PIPS recommendations ........................................................................................ 5
  2.4 Country reports ............................................................................................................. 7
  2.5 EPI target disease status and surveillance in the Pacific ........................................... 8
  2.6 Measles outbreak response .......................................................................................... 11
  2.7 Expanding benefits of routine immunization services ............................................... 13
  2.8 SRCC feedback ........................................................................................................... 16
  2.9 Immunization coverage ............................................................................................... 18
  2.10 Review of country surveillance and coverage performance .................................. 19
  2.11 Special interest session ............................................................................................... 20
  2.12 Vaccine security and logistics ..................................................................................... 21
  2.13 Country vaccine forecasting and management ....................................................... 24
  2.14 EPI communication and social mobilization ............................................................ 24
  2.15 PIPS Partners Coordination Meeting ................................................................. 25
  2.16 Planning and training ................................................................................................. 26
  2.17 EPI training in the Pacific – J-PIPS 2006/2007 ....................................................... 27
  2.18 Closing ceremony ....................................................................................................... 27

3. CONCLUSIONS AND RECOMMENDATIONS ................................................................... 28

ANNEXES:

ANNEX 1 - TIMETABLE

ANNEX 2 - LIST OF PARTICIPANTS, TEMPORARY ADVISERS, SRCC COMMITTEE MEMBERS, SHORT-TERM CONSULTANTS, OBSERVERS/REPRESENTATIVES AND SECRETARIAT MEMBERS IN THE SECOND PACIFIC IMMUNIZATION PROGRAMME STRENGTHENING WORKSHOP

ANNEX 3 - LIST OF PARTICIPANTS IN THE PIPS PARTNERS COORDINATION MEETING AND MAIN ISSUES DISCUSSED
I. INTRODUCTION

The Second Pacific Immunization Programme Strengthening (PIPS) Workshop was convened by the World Health Organization (WHO) and the United Nations Children's Fund (UNICEF) at the Mocambo Hotel in Nadi, Fiji from 8 to 12 May 2006. Co-organizers of the workshop included the Australian Agency for International Development (AusAID), the United States Centers for Disease Control and Prevention (CDC), Japan International Cooperation Agency (JICA), New Zealand International Aid and Development Agency (NZAID) and the Secretariat of the Pacific Community (SPC). The programme for the workshop is in Annex 1.

1.1 Objectives

(1) to review national immunization programme status within the context of regional and global developments in order to:

   (a) identify strategies to sustain and strengthen routine immunization programmes – including the surveillance systems and evidence-based communication strategies for improving immunization demand – to meet the regional twin goals and to maintain polio-free status; and

   (b) assess opportunities and strategies for introducing new and underutilized vaccines such as rubella and haemophilus influenzae type b (Hib);

(2) to review the Vaccine Independence Initiative (VII) status to ensure vaccine security; and

(3) to develop clearly defined mechanisms for coordinating technical and financial support from PIPS partner agencies.

1.2 Participants

Nineteen Pacific island countries (PICs) sent national representatives to the workshop. In addition, representatives and observers from each of the co-organizing agencies as well as the Government of Australia, Fiji Pharmaceutical Services and Fiji Pneumococcal Project were in attendance, as were temporary advisers, short-term consultants, and secretariat members from WHO and UNICEF. A list of participants, temporary advisers, consultants, representatives and observers and secretariat is in Annex 2.

1.3 Opening ceremony

On behalf of WHO, Dr Yang Baoping, Regional Adviser for the Expanded Programme on Immunization (EPI) of the WHO Western Pacific Regional Office, welcomed participants to the jointly organized Second PIPS Workshop. He welcomed Dr Lepani Waqatakirewa from the Ministry of Health Fiji and invited him to provide opening remarks. He thanked the Ministry of Health Fiji for hosting the workshop.

Dr Lepani relayed the greetings of the Honourable Caretaker Minister for Health. Fiji is currently experiencing a measles outbreak that is now tapering off following a nationwide measles supplementary immunization activity. Dr Lepani emphasized the importance of an
immunization coverage survey which was conducted in Fiji during 2005 and showed measles coverage of 80% as important for predicting an outbreak. He urged all countries to consider coverage surveys as a means of following up on their routine EPI services. Dr Lepani explored some of the reasons for the measles outbreak and stated there is a functioning cold chain, adequate staffing levels and good logistical support. He focused on the impact of the Fiji health sector reform and questioned if decentralization had any impact on immunization and other general public health programmes. Dr Lepani emphasized the importance of strong disease surveillance systems and stressed the importance of sharing information through surveillance networks such as the Pacific Public Health Surveillance Network (PacNET). Dr Lepani thanked WHO, UNICEF, donor governments and key partners for their role in partnership and support for the immunization programme in the Pacific.

Dr Chen Ken, WHO Representative in the South Pacific, welcomed all participants on behalf of WHO Regional Director Dr Shigeru Omi and made special mention of the Subregional Committee for the Certification of Poliomyelitis Eradication in Pacific Island Countries and Areas (SRCC) which was attending the meeting for the first time. He highlighted the role this committee has had in guiding the Region towards polio-free status. In 2005, all 37 countries of the Western Pacific Region accepted the twin goals of hepatitis B control and measles elimination by 2012. Dr Chen Ken stressed the need for health services to reach each child born in the Region within the first year of life to provide immunization and other health interventions. He emphasized the challenges faced by PICs in reaching every child given the diversity of the Region and the remoteness of many communities. He suggested improved links between health services and community and in many instances imaginative solutions were required.
Dr Chen Ken welcomed the PIPS initiative as an expression of a shared commitment to saving the lives of children and mothers.

Ms Gillian Mellsop, UNICEF Pacific Representative, thanked the Ministry of Health Fiji for hosting the workshop and also acknowledged the donor agencies AusAID, NZAID, JICA, and CDC for their continuing support to immunization programmes in the Pacific. She affirmed that the main purpose of this workshop is to ensure the success and benefits of the EPI by identifying and strengthening best practices and developing new ones. In May 2002, the United Nations General Assembly Special Session set forth an updated 21st century agenda that was based on the vision of a world fit for children and serves as a guideline for the implementation of the Millennium Development Goals. She advocated that participants must work together (via clear plans of action for EPI) with a focus on reducing the infant and child mortality rates thus contributing to achieving Millennium Development Goal Number 4: to reduce child mortality. Those working to improve child survival are recognizing the need to continue to build on integrated approaches to services and programmes. She acknowledged the PIPS partnership as an excellent example of this and commended partners for their very successful second year working together to improve immunization services in the Pacific.

1.4 Appointment of Chairperson, Vice-Chairperson and Rapporteur

All participants introduced themselves, and officers for the meeting were selected. Mr Leonard Tabilip, National EPI Coordinator, Vanuatu, was appointed Chairperson; Sr Sela Paoasi, National EPI Coordinator, Tonga, as Vice-Chairperson; and Ms Annette Aguon, Communicable Diseases Coordinator III, Guam, as Rapporteur.
2. PROCEEDINGS

2.1 Workshop overview

Dr Kamrul Islam, Project Officer for Health and Early Childhood Development, UNICEF Pacific Office, presented an overview of the workshop timetable and objectives. The objectives were outlined in 1.1 above.

2.2 Overview of the EPI

2.2.1 Global overview

The global overview, presented by Dr Osman Mansoor, UNICEF, included selected statistics on the progress of immunization coverage and the accelerated disease control initiatives (polio, measles, and maternal and neonatal tetanus elimination). These were presented in the context of the Millennium Development Goals (MDGs) and the contribution of existing and new vaccines to potentially prevent up to a quarter of the deaths in under-five-year-olds. He identified the need to complete the unfinished agenda of achieving more than 90% immunization coverage globally by targeting the unreached with a package of service to address the under-five mortality and ensure sustainability.

2.2.2 Regional overview

Dr Yang Baoping presented an overview of EPI in the Western Pacific Region with over 1.7 billion people, about one-fourth of the world’s population living in 37 countries and areas. PICs are the majority of the countries but only a fraction of the total population. Despite the diversity within the Region, overall immunization coverage rates are high. The important accomplishment of achieving polio-free status in 2000 has been maintained, despite polio outbreaks on the Region’s doorstep in countries such as Indonesia. The risk of polio outbreaks either due to importation or from the emergence and circulation of vaccine derived poliovirus (VDPV) still remains. Maintaining high population immunity and quality acute flaccid paralysis (AFP) surveillance is the only way to prevent such a situation.

The Global Immunization Vision and Strategy (GIVS) 2006-2015 maps out a vision of global EPI systems beyond routine services. The key pillars of GIVS are protecting more people introducing new vaccines and technologies, integrating immunization with other linked interventions and surveillance; and immunizing in a context of global interdependence. GIVS provides the Global Immunization Goals of:

(1) by 2010 or earlier

(a) 90% vaccination coverage in every country;
(b) 80% vaccination coverage in every district; and
(c) measles mortality reduction by 90% compared to 2000;
(2) by 2015 or earlier

(a) Sustain vaccination coverage achieved by 2010; and

(b) Morbidity and mortality reduction by 2/3 compared to 2000.

The WHO Region Committee for the Western Pacific at the fifty-sixth session in September 2005 went a step further and decided that (by 2012) the Western Pacific Region should aim to:

(1) eliminate measles;

(2) reduce chronic hepatitis B carriage rates to less than 2% in five-year-olds as an interim milestone toward a final goal of less than 1%; and

(3) maintain polio-free status through high-quality AFP surveillance and high immunization coverage.

The Region has seen a dramatic fall in reported measles cases over the last 20 years to a point where the Region only sees a small fraction of deaths from measles (see Figure 1) compared to previously. To achieve measles elimination, sustained high coverage of more than 95% with two doses of a measles containing vaccine (MCV) will be needed.

Figure 1: Measles cases and coverage for the Western Pacific Region reported from 1980-2004

The Western Pacific Region is the first of six regions in WHO with hepatitis B vaccine in every national immunization schedule. The challenge is to ensure that every child born in the Region is protected against hepatitis B within 24 hours of birth. The Region has made further gains in the area of maternal and neonatal tetanus (MNT) elimination by reducing the number of countries where MNT remains a public health problem from six to five.
The key challenges faced by the Region involve reaching all children including those most difficult to reach. Each year in the Region almost 2.4 million children are not fully immunized with vaccines included in their countries' schedules. More than 90% of these children are in six countries. Current methods have failed to meet the needs of these children and therefore more political commitment and innovative strategies are required. Immunization coverage within many countries is not uniform and often high national coverage hides districts with very low coverage. The final challenge faced by the Region is ensuring that the full benefits of newly introduced vaccines are provided to all children as soon as possible.

Making best use of the GIVS to address the challenges ahead requires decisive action and investment as well as comprehensive strategies. It requires a strong commitment to “Reach every Child”. To achieve this goal, adequate systems and infrastructure are needed to ensure services are provided to every community and communities are mobilized to use these services. Additional internal and external as well as human and financial resources are necessary. Strengthening data management and making data available at the district level and encouraging the use of information for decision-making is required. Finally, surveillance systems within the community and laboratory capacity will assist achieving the GIVS.

2.3 2005 PIPS recommendations

Dr Yoshikuni Sato, Medical Officer, EPI, WHO Regional Office for the Western Pacific, presented an overview of the recommendations from the 2005 PIPS meeting.

2.3.1 Routine EPI

- Immunization services should reach all children regardless of where they live. Vaccination coverage monitoring is encouraged at the health facility level.

- The EPI Committee should meet on a regular basis, carry out annual policy and programme reviews, and develop comprehensive multiyear plans.

- Health workers should have annual refresher training and this should be part of the annual EPI workplan.

2.3.2 Hepatitis B

- Coverage and timeliness of the first dose of hepatitis B vaccine (HepB1) should be increased for infants born in and outside health care facilities.

- The system for recording and monitoring HepB1 timeliness should be reviewed to ensure that it is included in coverage data at all levels.

- Coverage surveys should whenever possible collect information on timing of HepB1 proportion of doses given within 24 hours of birth.

2.3.3 Measles

- Analyze measles population immunity status for all age cohorts and identify immunity gaps.

- Achieve, document and sustain 95% coverage with two doses of measles vaccine in all districts or conduct measles supplementary immunization activities (SIAs).
• School entry should be used as a mechanism to identify and catch up children that have missed immunizations.

2.3.4 Rubella vaccine

Countries considering rubella vaccine introduction should seek technical advice regarding necessary programme requirements and the most appropriate strategy before implementation.

2.3.5 Surveillance

• Countries should ensure that all reporting sites have a trained hospital coordinator in place, and that monthly reports are completed and forwarded to WHO within three months of month end.

• WHO should explore improvements to the hospital-based active surveillance (HBAS) system, including expansion of the e-mail reporting trial.

• Efforts should be made to improve laboratory coordination, including sample transport, with the laboratory network and the regional measles laboratory network of the WHO Regional Office for the Western Pacific.

2.3.6 Vaccine Independence Initiative (VII)

• UNICEF should develop a new VII vaccine ordering form that provides guidance on annual vaccine requirements. When orders differ markedly, UNICEF should follow up with the country.

• All countries should pay their vaccine cost within 60 to 90 days of receiving their invoices.

• Countries are requested to continue sending their vaccine arrival reports (VAR) in a timely manner.

2.3.7 Communications

All Pacific island countries should develop an EPI communication plan based on national and subnational desegregated data which includes advocacy, programme communication and social mobilization components, with specified timeframes and measurable objectives.

2.3.8 Pacific Immunization Programme Strengthening Initiative

• PIPS should function as the Pacific Regional EPI Coordinating Committee, with representation from all Pacific island countries, donor and technical partner agencies.

• The PIPS Committee should meet at least once a year, in conjunction with the annual EPI managers meeting (preferably in the second quarter).

• All regional immunization activities should be coordinated through PIPS.
2.4 Country reports

Twenty countries presented a country report (French Polynesia and the Commonwealth of the Northern Mariana Islands were not present for the country presentations). The country presentations reported on the following areas: (1) key achievements; (2) PIPS recommendations; (3) challenges and problems; and (4) future EPI activities.

2.4.1 Key achievements

Great diversity still exists among the EPI programmes in PICs. However, all countries reported achievements in their EPI programmes during 2005. Many countries reported working towards the regional measles elimination goals by developing measles elimination plans with the support of partner agencies. Some PICs conducted mass measles immunization campaigns in the past year. All countries reported progress towards the goal of hepatitis B elimination. Countries have strengthened both the timeliness and reporting of the birth dose of hepatitis B vaccine and some countries are working towards the development and implementation of hepatitis B control plans. Finally, some countries have successfully introduced rubella and Hib vaccines into their schedules.

2.4.2 PIPS recommendations

Progress towards the implementation of the recommendations from the 2005 PIPS workshop varied. All countries reported working towards strengthening their routine EPI programmes. A number of countries had established EPI committees that were meeting on a regular basis. Most countries reported successfully conducting EPI training with the support of partner agencies.

With the exception of Solomon Islands and Vanuatu, all countries have integrated a rubella containing vaccine into their routine immunization services.

All countries agreed on the importance of strong disease surveillance systems. However, the quality of these systems varied among countries. There was a commitment to strengthening these systems in the future.

Five countries (Cook Islands, Fiji, Kiribati, Solomon Islands and Vanuatu) had developed EPI communication plans either to promote their routine EPI services or to contain or prevent measles or rubella outbreaks.

2.4.3 Challenges and problems

The majority of countries reported challenges with reaching every child due to geographical isolation and lack of sea, land or air transport. In addition, the rising cost of fuel continues to impede access. Migration and consequent shortages of nurses affect most countries.

Many countries continue to experience problems in reporting accurate coverage data due to difficulties in estimating denominators. Most countries faced problems in delivering EPI training and maintenance of the cold chain equipment due to a lack of technical expertise within the country. A number of countries reported problems with the development and implementation of EPI plans, i.e. annual five-year plans, measles elimination plans and hepatitis B control plans.

Many countries reported challenges in strengthening disease surveillance programmes especially in regard to investigating outbreaks of disease. Some countries face difficulties...
integrating disease surveillance and EPI programmes; others struggle with health care workers appreciating the importance of disease surveillance and the HBAS system.

Managing competing health priorities at all levels of health service delivery continues to be an issue for countries. Some countries report continued problems with vaccine supply, cold chain maintenance, sustaining of high routine EPI coverage and the management of EPI waste.

2.4.4 Future EPI activities

All countries remain committed to strengthening their routine EPI programmes, especially focusing on the twin goals of hepatitis B control and measles elimination. Some countries reported that they plan to improve timeliness and reporting of the first dose of the hepatitis B vaccine and develop hepatitis B control plans.

For some, other planned activities for 2006 included introducing new vaccines, developing EPI communication plans, undertaking coverage survey, and strengthening EPI disease surveillance.

2.5 EPI target disease status and surveillance in the Pacific

2.5.1 Pacific EPI disease surveillance in the Pacific and HBAS

Mr Richard Duncan, Technical Officer, EPI, WHO Regional Office for the Western Pacific, emphasized that the aim of EPI programmes is to prevent disease. He explained that immunization coverage data alone are not enough to monitor the effectiveness of EPI programmes; disease surveillance data are also important indicators of programme effectiveness.

WHO receives disease surveillance information from Joint Reporting Forms (JRFs) and the HBAS system. Joint reporting forms are submitted annually by countries to UNICEF and WHO and report the number of cases of vaccine preventable diseases. The value of surveillance data reported by JRF was discussed as there are differences in surveillance systems among countries and often no laboratory confirmation or investigation of some of diseases.

The HBAS system is an active surveillance system that was developed in 1997 to monitor diseases of interest. The HBAS system has 58 reporting sites and 200 key clinicians who are responsible for reporting cases of AFP, acute rash and fever (AFR) and neonatal tetanus (NT) to their National Coordinator on a monthly basis. These reporting forms are then sent to the WHO office in Suva, Fiji at least quarterly. The number of reporting sites varies for each country, and all reporting sites are based in hospitals.

Since the Region was certified polio-free in 2000, the number of countries submitting HBAS reports has fallen significantly. Since 2004, the numbers of sites submitting timely reports to WHO has stabilized to 50%-60%. WHO ensures the timely feedback of information to countries by sharing surveillance information on "Pacific Public Health Surveillance Network (PacNET) Restricted" within days of receiving the data from countries. There has been increased awareness of the value of the HBAS system as an early warning system for AFR surveillance.

The HBAS had many achievements in 2005. The HBAS manual was made available to all countries on compact discs as well as the Internet. It was also translated into French. A response to the Importation of Wild Polio Virus Plan was also finalized and countries were encouraged to adopt this plan to their own situation. A retrospective record review manual was finalized and shared with countries and this will assist PICs in conducting periodic record reviews.
An e-mail reporting system was developed for countries to report electronically to WHO. The system was piloted by six countries and then expanded to 13 of 20 countries. There has been significant improvement in timeliness of reporting by countries to WHO and a reduction in the number of countries 'cluster signing' report forms. E-mail reporting has made the HBAS system a more responsive surveillance system. The e-mail reporting system is easier for countries with a single reporting site and the challenge now is to improve reporting from countries with multiple reporting sites.

The HBAS system is restricted to sentinel sites based in hospitals. Further review is required to determine whether this system is sensitive enough to detect an outbreak of measles or whether it will meet measles elimination criteria. The question was raised whether this system could be expanded to include other diseases such as meningitis or influenza.

2.5.2 AFP surveillance and SRCC update

Dr Lisi Tikoduadua, member of the Subregional Committee for Certification of Poliomyelitis Eradication in Pacific Island Countries and Areas (SRCC), reported that the SRCC was established in 1996 at the request of the Regional Certification Commission (RCC). The committee serves all 20 Pacific island countries as they are treated as a single epidemiologic block for the purpose of polio-free certification. The committee’s mandate is to function as an expert review committee for final classification of all cases of AFP, to oversee the maintenance of polio-free status and to report annually to the RCC.

PICs continue to face many challenges in ensuring they maintain their polio-free status. Identifying and controlling wild poliovirus in human populations and laboratories is essential to maintaining this status.

All PICs need to strengthen their HBAS systems with a focus on AFP. To maintain certification, countries need to ensure that 80% of monthly HBAS forms are submitted on time to WHO, that at least 80% of cases of AFP have at least two stool specimens collected within 14 days of onset of paralysis, and that at least 80% of cases receive a 60-day follow-up examination. A non-polio AFP rate of one case of AFP per 100 000 children is expected from each region to meet surveillance targets.

A survey of laboratories in PICs has been conducted to identify and contain facilities at risk of storing poliovirus-containing specimens. The higher-risk facilities are those with ultralow temperature freezers and those with long-term storage capabilities. The SRCC concluded in 2005 that the phase of laboratory containment of poliovirus has been completed for PICs and that no laboratory in the Pacific contains specimens that are either wild poliovirus infectious or potentially infectious material.

Although the risk of polio reintroduction to PICs is classed as low, the variability of third dose oral polio vaccine (OPV3) coverage in PICs may leave some countries vulnerable if polio was reintroduced.

2.5.3 Polio eradication initiative preparations for cessation for stopping OPV

Dr Sigrun Roesel, Medical Officer, EPI, WHO Regional Office for the Western Pacific, stated that while only four countries remain poliomyelitis-endemic (Afghanistan, India, Nigeria and Pakistan), six countries have reported poliomyelitis cases in 2006 due to importations (Bangladesh, Ethiopia, Indonesia, Nepal, Somalia and Yemen). Progress in both endemic and reinfected countries was greatly aided by the development, licensing and widespread use of monovalent type 1 and type 3 oral polio vaccines. In Nigeria, more than one fifth of children are
still not receiving oral polio vaccine during immunization activities in eight key northern states, leading to increasingly uncontrolled transmission of poliovirus in these areas.

Global certification of the eradication of wild poliovirus is currently anticipated by 2010. The extension of the timeframe compared to the original goal makes it imperative for countries in the Western Pacific Region to sustain both high-quality surveillance and levels of population immunity appropriate to prevent the spread of wild poliovirus importations and to avoid the emergence and possible circulation of VDPV.

To protect the current poliomyelitis-free status it is equally important that all Western Pacific Region countries maintain an accurate inventory of biomedical laboratories storing wild poliovirus infectious materials and ensure that biosafety storage requirements are met.

Several episodes of circulating VOPV has forced the conclusion in recent years that continued use of live attenuated polioviruses contained in OPV after interruption of global transmission would ultimately be incompatible with eradication. Safely stopping use of OPV will require:

1. confirmation of interruption of wild polioviruses (i.e. global certification of eradication);
2. appropriate containment of all polioviruses in laboratories and vaccine-production facilities;
3. continued poliovirus surveillance and notification capacity that meet international standards globally;
4. a WHO/UNICEF managed stockpile of monovalent oral poliovirus vaccine (mOPV) with internationally agreed mechanisms for use; and
5. processes for stopping global OPV use synchronously.

2.5.4 Dried venous blood spot method for AFR surveillance

Dr Health Kelly, PIPS temporary adviser, Victorian Infectious Diseases Reference Laboratory (VIDRL), described the use of dried blood samples (DBS) for diagnosing measles and rubella. One advantage of DBS is that they can be stored and transported at room temperature, although the sensitivity and specificity of results improve if they are stored at 4 °C. In addition dried blood may be transported between countries and is exempt from International Air Transport Association (IATA) regulations.

VIDRL studies have shown that DBS can be equivalent to serum for accurate diagnosis and surveillance of measles and rubella. Finger prick dried blood and dried venous blood are not significantly different to serum if collected and stored optimally (i.e. collected aseptically, dried thoroughly before transport, stored at 4 °C and transferred within one week of collection).

WHO continues to recommend serum-based immunoglobulin M (IgM) assays as the ‘gold standard’ for diagnosis of measles (and rubella); however, testing for IgM from dried blood may be beneficial for regions that:

- continue to experience measles outbreaks in remote areas;
- have minimal laboratory support; and
• have only limited access to required expertise/supplies for conventional specimen collection.

Whenever possible, conventional sampling methods should be performed in a percentage of suspected cases. Regions with controlled measles that have periodic outbreaks and have a developed subnational laboratory could initiate DBS sampling in parallel with conventional methods. Measles genotyping can be obtained from dried blood.

2.6 Measles outbreak response

2.6.1 Considerations for outbreak response for measles

Dr Susan Reef, United States Centers for Disease Control and Prevention (CDC), presented the considerations for outbreak response for measles. The current WHO outbreak response immunization (ORI) for measles published in 1999 states “the immunization response in most outbreaks occurs too late to affect the impact of the outbreak... Supplementary vaccination activities in the course of an outbreak are not recommended unless there is substantial political or community pressure.” Regional policies may vary. The recommendation most recently published by the WHO Western Pacific Region notes: “Vaccination of previously unvaccinated individuals should start immediately when measles outbreak is suspected... Experience has shown that because of high communicability of measles, many susceptibles will have already been infected before outbreak is recognized.”

Since the time of the published WHO recommendations, there has been an evolution of strategies to achieve global measles control. These include publication of the measles mortality reduction goal, with an emphasis on strengthening routine immunization services and ensuring a second opportunity for measles vaccine. Four WHO regions have set measles elimination goals.

To evaluate ORI it is important to consider the frequencies of outbreaks, shifts in the age distribution of cases, and measles-specific mortality. In assessing the measles outbreak in Haiti during 2000, it is important to note that Haiti had achieved high coverage (more than 95%) through a nationwide SIA conducted in 1994. For six years, Haiti remained measles-free; however, routine coverage for a MCV ranged from 32% to 86%. The outbreak experience showed that timely, high-quality, limited geographic area campaigns did not stop the spread. High coverage was found to be imperative to stop transmission. The ORI was found to be highly resource intensive. In predicting an outbreak it is important to estimate the number of susceptibles by age group and geographic location. Some considerations on evaluating the capacity to respond may include epidemiological capacity, internal and external capacities (e.g. microplanning, supervision, vaccines).

2.6.2 Measles outbreak in Fiji

Dr Josaia Samuela, Ministry of Health Fiji, described the measles outbreak currently underway in Fiji. A total of 125 cases had been reported by 8 May 2006. Cases were predominantly in children less than four years old and the highest attack rate was reported in children less than 12 months. The outbreak was predominantly in the Western Division, but cases were reported in other divisions.

Inadequate MCV coverage (80%) was found in the 2005 immunization coverage survey conducted.

In response to the outbreak, the Ministry of Health Fiji formed a Measles Outbreak Task Force with representatives from all divisions and partner/donor agencies. The Measles Outbreak
Task Force elected to initiate a measles supplementary immunization activity that aimed at immunizing all children between the ages of six months and six years. The national level was responsible for disease surveillance, SIA microplans, social mobilization and the training of nurses. The divisions were responsible for the logistics, budgeting and the implementation of the SIA.

The measles SIA was successful in reaching 97% of the target age group by late May 2006. Detailed microplanning by all divisions and the assistance that the Ministry of Health Fiji received from partner agencies were factors in achieving high coverage.

2.6.3 Communication and social mobilization in an outbreak

Mr Saula Volavola, National Centre for Health Promotion, Ministry of Health Fiji, stated that a well-planned communication strategy during an outbreak could hasten containment and mitigate an outbreak's impact. The National Centre for Health Promotion in Fiji's Ministry of Health worked in close partnership with all stakeholders involved in the measles outbreak to rapidly plan, manage and monitor a behaviourally focused communication and social mobilization programme that contributed to the successful attainment of 97% measles vaccination coverage.

Communication strategies during an outbreak must be planned in advance, build trust with the community, be announced early, ensure transparency, respect public concerns and be inclusive. The communication strategy developed for the measles outbreak had three phases. The first phase warned the public about the cases of measles, the second phase focussed on vaccination of the target population, and the final phase involved the evaluation of the communication strategy.

The communication strategy used for this campaign was based on the WHO Communication for Behavioural Impact Approach (COMBI) approach to integrate five action areas. The administrative mobilization involved meetings, letters, phone calls, press conferences, regular news releases, senior staff interviews, early announcement, regular updates, accountability, transparency, and trust and was inclusive. It is important to note there were no rumours, no criticisms and no political inference. Community mobilization involved the distribution of 60,000 fact sheets in English, Fijian and Hindi to schools, religious organizations, district officers, Roko Tuis, advisory councillors, village headmen and chiefs. There were also local announcements about vaccination team visits. Mass media advertising was delivered in intensive bursts of television, radio (all stations), cinema and newspaper advertisements.

The importance of interpersonal communication between health workers and families during an outbreak was also highlighted. Point-of-service communication promotion occurred as a result of the of 2000 fact sheets for health workers and flags which were displayed at vaccination points.

Surges in children presenting for vaccination correlated with intensification of communication. The cost of the communication strategy was equivalent to US$ 0.50 per “child to be vaccinated” and ensured a behavioural impact – not just awareness. National coverage achieved was 97% in five weeks.

2.6.4 HBAS system performance during a measles outbreak

Mr Richard Duncan presented that the HBAS system detected the Fiji measles outbreak in a timely manner. The number of days from the first case of measles presenting to a HBAS reporting site and the notification to the Ministry of Health Fiji through the HBAS system was
five days. The Ministry of Health Fiji alerted WHO to the measles case within one day of receiving the report. The number of days from rash onset to laboratory confirmation of measles IgM was 15 days at the L2 laboratory in Fiji and 20 days at the L3 laboratory in VIDRL in Australia. A PacNET alert was posted to inform PICs of cases of measles in Fiji within 21 days of rash onset of the first case.

The main delay during this measles outbreak was detection of the initial case. It was not until the case was presented to an HBAS site that measles was suspected. As the number of cases of measles seen by clinicians decreases, the challenge will be for them to maintain clinical suspicion of measles, especially in community settings. It is important that all clinicians who see cases of AFR have systems in place for the prompt ordering and transport of bloods to the laboratory.

In response to the measles outbreak, the 21 HBAS reporting sites in Fiji were requested to report to the Ministry of Health daily; all other PICs were requested to increase their reporting to weekly. A summary of these results was posted weekly on “PACNET Restricted”. The enhanced surveillance conducted by all PICs during this outbreak identified six other countries with cases of rash and fever, all of which were not measles.

HBAS e-mail reporting is valuable for timely detection and notification of cases of AFR; however, there may be delays in laboratory confirmation due to transport and L2 laboratory access. The role of the HBAS system may be expanded to include other communicable diseases of interest (e.g. influenza) and may be required to include community-based reporting sites.

2.7 Expanding benefits of routine immunization services

2.7.1 EPI vaccines and schedules in the Pacific ‘Equity in Diversity’

Mr Richard Duncan presented the diversity of EPI schedules in the Pacific. There is diversity between the vaccine presentation and their timing. There is great difference between when MCV1 and MCV2 is given. The majority of countries give MCV1 at 12 months and MCV2 between 13 months to 10 years. WHO recommends that MCV2 should be given at least one month after the first dose but before school entry.

It is important for countries to base their immunization schedule on the local situation before consideration is given to the harmonization of immunization schedules between countries. The harmonization of immunization schedules may offer some benefit to the few children who migrate between countries and to ordering/sharing of vaccines.

2.7.2 Preventing mother-to-child transmission for better hepatitis B control

Dr Yang Baoping observed that the Western Pacific Region has a high burden of hepatitis B and has set the target of reducing chronic hepatitis B infection rates to less than 2% by 2012, as an interim milestone to the Regional goal of less than 1%. An important element to achieve the milestone and goal will be to prevent mother-to-child transmission, as 3% to 5% of all infants in the Region may become chronic carriers of hepatitis B if measures are not undertaken to prevent mother-to-child transmission.

Universal infant immunization with three doses of hepatitis B vaccine starting from birth is the most effective programmatic strategy to control hepatitis B. The risk for vertical transmission of hepatitis B is much higher than for human immunodeficiency virus / acquired immune deficiency syndrome (HIV/AIDS) due to much higher infectiousness and transmissibility of hepatitis B. While there is no simple way to prevent mother-to-child
transmission for HIV/AIDS, preventing vertical transmission of hepatitis B is relatively easy, as hepatitis B vaccine is effective in preventing infection if given within 24 hours of birth.

Several opportunities exist to improve the coverage and timeliness of the birth dose of hepatitis B. PICs are encouraged to increase access to trained maternity care and to administer the vaccine immediately after birth to improve coverage.

The hepatitis B vaccine is relatively heat stable and can be stored out of cold chain if certain conditions are met, i.e. only after adequate training of health workers, only for ‘birth dose’, only at the point of use, and only for one month from the point of taking it out of cold chain.

National EPI managers are encouraged to ensure systems are in place for regular supply of hepatitis B vaccine to all the public and private health facilities providing maternity care. In addition, they should clearly designate the person responsible for birth dose, i.e. paediatrician or obstetric nurse or any other person relevant in a country context. The location for storing the vaccine and giving the injection should also be clearly communicated to all health facilities. The best option is to store the vaccine in the labour room and give the hepatitis B vaccine before transferring the mother to the postnatal ward.

Increasing timely birth dose coverage is most challenging for births taking place at home. Births at home may be further classified into two categories: (1) births at home supervised by trained attendants competent to give injections, and (2) births at home supervised by attendants not competent to give injections. In the first case, efforts will be required to provide the vaccine to the midwives. There are several possible options for this which vary according to the country:

1. A single dose vial of hepatitis B vaccine along with an auto-disable (AD) syringe can be made an integral part of the midwife’s kit.

2. The vaccine can be stored out of cold chain at a lower level facility that is easily accessible to the midwife.

3. The midwife collects the vaccine from a health facility on monthly basis and stores it at her home.

All midwives will require extensive training prior to the implementation of any of these options and they will need to be aware of the recording and reporting systems to monitor the coverage and timeliness of birth hepatitis B vaccine.

By far the most difficult group to reach is the at-home births supervised by attendants not competent to give injections. All traditional birth attendants (TBA) should be trained to provide information on the need of early dose of hepatitis B vaccine. The TBAs must be educated to notify nearest health facility about a birth, which can then arrange to send a vaccinator to provide the birth dose. Alternatively, TBAs may encourage the mother or other household members to take the baby to the nearest health facility for the vaccine. Health workers must be clearly designated in each health facility to provide the birth dose and to get information about all births in the community.

2.7.3 Measles elimination in the Pacific — what is needed by 2012

Dr Ernest Smith, Medical Officer, EPI, WHO Regional Office for the Western Pacific, presented the impact of measles on child health. It is present as one of the indicators of the United Nations Millennium Development Goals (proportion of children vaccinated for measles
by 12 months of age), and measles remains the leading cause of vaccine preventable childhood morbidity and mortality in the Western Pacific Region.

From 1983 to 1997, there was an average of four outbreaks every year in the Pacific. Following outbreaks in 1996 and 1997, the catch-up campaigns in 1997 and 1998 led to an interruption of measles transmission from March 1997. Since then, importations have led to small limited outbreaks in French Polynesia and Guam, an outbreak in 2003 in the Marshall Islands, and the outbreak in Fiji in February 2006.

“Measles elimination” means the sustained interruption of measles virus transmission. Continued high immunization coverage and effective surveillance are required to maintain and document interruption. Without this, the cycle of outbreaks will reoccur in the Pacific. However, if coverage is high, even if an importation occurs there is no ongoing measles transmission due to a majority of the population already being protected. It is important to recall that measles elimination does not mean zero cases. There will be importations. Protection of the population is the key.

To ensure good surveillance, countries should establish and follow surveillance performance indicators, record and report suspect measles cases, and make final case classification, even for negative/discharded cases. As countries get closer to elimination, they must be able to look for any potential case of measles, even at village or community level. Only 9% of cases on average seek care at hospitals. A local hospital that attends to a community’s primary health care needs may serve as an appropriate community site. But a larger referral hospital serving as a sentinel site (not providing primary community care) is not likely to pick up all possible cases. There is also a need to establish a method to convey information by the fastest means possible (telephone, text messages, fax, e-mail, etc.). The e-mail trial of the HBAS system is one such method, but it would need to cover every country and full case-based information.

Routine immunization efforts in the Pacific are still below what is needed for protection of the population from outbreaks; it is clear that measles vaccine coverage at an average 80% for both MCV1 and MCV2 is not guaranteeing protection of the population or meeting the immunization indicator criteria for elimination.

The road to elimination is clear. What is needed first is to protect the population by increasing immunity to 95% with two doses of an MCV. The Pacific has the capacity to eliminate measles soon by ensuring high two-dose coverage of MCV (or should conduct SIAs as the 2005 PIPS recommendations stated).

A well-functioning system would ensure that all children are reached. Immunization with high coverage will prevent outbreaks. If outbreaks due to importation occur, investigation and action can be taken to identify cases and ensure those at risk are immunized. All these actions will result in fewer cases, hospitalizations, possible deaths and associated costs.

2.7.4 Hib vaccine

Dr Tilman Ruff, PIPS temporary adviser, presented an overview of the *Haemophilus influenzae* type b (Hib) disease burden in the Pacific and vaccine. In the absence of immunization, Hib is generally the most common cause of bacterial meningitis in children under five years, the second most common cause of bacterial pneumonia, and an important cause of other serious bacterial infections in children. Worldwide, Hib is estimated to cause more than 400,000 deaths annually in children under five.
Countries that have introduced Hib conjugate vaccine in their national immunization programmes have observed rapid, dramatic and sustained declines in Hib disease, reduction in carriage of the organism, and a substantial protective benefit even for unimmunized children through herd immunity, even at moderate rather than very high levels of vaccine coverage. WHO recommends the implementation of Hib immunization worldwide.

In PICs, studies in diverse countries have demonstrated moderate rates of Hib disease, with estimated Hib meningitis incidence rates in children under five of 66 to 94 per 100,000, compared with a global developing country average of 60 per 100,000. Following Hib vaccine introduction, substantial declines in meningitis hospitalization and mortality, pneumonia deaths in infants, and other Hib diseases have been observed in PICs. Data from Tonga show high cost-effectiveness of Hib immunization.

Combination vaccines allow Hib immunization to be delivered without additional injections, with immediate coverage equivalent to diphtheria-tetanus-pertussis (DTP) and/or hepatitis B coverage, and with programme simplifications and savings that offset higher vaccine cost. Because of the high cost of Hib in comparison with other EPI vaccines, PICs have required external support for introduction, at least initially.

2.7.5 WHO New Vaccine Introduction Guidelines

Dr Osman Mansoor presented an overview of the New Vaccine Introduction Guidelines issued by WHO in 2005. New vaccines that benefit public health are becoming increasingly available, but have not yet been adopted by programmes. The guidelines offer a framework and checklists to help countries (1) make a decision about whether or not to introduce a new vaccine; (2) implement the decision; and (3) evaluate its impact. To help address the potential conflict between the choice to add a vaccine or to strengthen existing services, the guidelines propose a list of indicators of EPI performance so that these can be strengthened in preparation for, or as part of, new vaccine introduction.

Most PICs have already introduced Hib and rubella vaccines into their childhood immunization schedules. Other countries still require assistance with the implementation of new vaccines. Only three PICs have introduced the conjugate pneumococcal vaccine and none have introduced the rotavirus vaccine.

All PICs need to be actively considering how to introduce these vaccines, as they are likely to have a dramatic impact on childhood mortality and morbidity. The main challenge will be the increasing cost of new vaccines, especially for those countries that have not yet been able to mobilize the funds to introduce the Hib vaccine.

2.8 SRCC feedback

Dr Lisi Tikoduadua presented the recommendation and conclusions from the SRCC meeting.

The SRCC noted the recent resolution on regional measles elimination and hepatitis B control target dates. The Regional Committee also urged Member States to maintain polio-free status by sustaining high-quality AFP surveillance and high immunization coverage of polio vaccines.

Improvements in HBAS reporting have not yet been reflected in improved AFP case identification, case investigation, stool shipment and 60-day follow-up. Maintaining support of
key clinicians is becoming more difficult as the target date for global polio elimination continues to be delayed.

Importations of wild polioviruses from areas with circulation cannot be prevented, and immunity gaps may not be easy to fill in the short term; therefore, it is imperative that PICs maintain high-quality AFP surveillance. The SRCC emphasizes the central role of national coordinators in conducting and facilitating all aspects of surveillance, reporting and complete case investigation. The SRCC recommends that efforts be strengthened to keep hospital directors informed about relevant aspects and issues of HBAS. If countries experience less-than-expected cases, performance should be validated through targeted retrospective record reviews.

The SRCC encourages wide use of the *HBAS Manual* by EPI managers and by national and hospital coordinators. To sustain improved HBAS reporting and visibility, the WHO secretariat should also continue to provide feedback on HBAS reporting performance, posted monthly on “PacNET Restricted” and provide relevant updates on (global) polio eradication, to be regularly placed on PacNET.

The SRCC expressed its sincere appreciation to VIDRL for continuous outstanding support and collaboration in PIC AFP surveillance and polio control efforts.

Routine immunization coverage in some PICs is insufficient, and limited poliovirus transmission could be established if an importation occurred. Maintaining high OPV coverage and addressing intra-country coverage differences are essential and should be supported and strengthened. Regular analysis of district and health centre coverage data should be conducted so that appropriate responses can be undertaken.

The SRCC noted with satisfaction that the RCC has concluded that the PICs completed phase 1 (laboratory survey and inventory).

The SRCC noted limited (if any) development of national wild polio preparedness plans in the PICs and strongly encouraged all PICs to adopt the generic plan, with additions and modifications where necessary, to meet national requirements.

The SRCC welcomed the development (with Committee endorsement) of a generic protocol for responding to wild poliovirus importation (including response to VDPV detection).

While acknowledging potential competition for (often limited) resources, the SRCC believes that current activities for influenza provide opportunity for synergy and support of AFP activities. This may also be the case for measles outbreak preparedness, and such opportunities should be sought.

The SRCC welcomed the opportunity to hold its annual meeting in conjunction with the PIPS workshop in order to have direct contact and exchange with national EPI managers and coordinators; such interaction provides an important opportunity to strengthen regional efforts. Greater national ownership of EPI activities in the PICs is needed, especially in the lead up to OPV cessation; SRCC members consider this a particularly important advocacy area for the Committee.
2.9 Immunization coverage

2.9.1 Vaccine coverage in the Pacific

Mr Richard Duncan presented an overview of vaccine coverage in the Pacific. Overall immunization coverage for PICs as a whole is good; however, there continues to be considerable variation among countries. Some PICs are not reaching more than 90% for all antigens while some countries are not reaching 90% with any antigens. All PICs need to work towards incorporating the regional immunization goals and the GIVs into their EPI programmes. The goals are:

1. 90% national coverage and more than 80% coverage in all districts by 2010;
2. measles elimination by 2012 with more than 95% coverage with two doses of MCV; and
3. hepatitis B control with 80% of the first dose of the hepatitis B vaccine given within 24 hours of birth by 2004 and the third dose of hepatitis B vaccine coverage at more than 95% in all districts by 2005.

Some PICs appear to be losing past gains. An estimated 13 000 Pacific children each year miss the full benefit of basic vaccination with most of these children residing in five countries. Many factors impact a country's coverage rates and all countries need to work towards strengthening their routine EPI services if they are to meet global and regional goals. The commitment of government in providing a strong EPI service is imperative in improving coverage rates.

2.9.2 Strategies for strengthening routine coverage

Dr Kamrul Islam encouraged all PICs to examine the factors affecting their immunization coverage rates and identify populations who are not being reached by their EPI programmes. In evaluating their EPI programmes, PICs need to consider the political and financial commitment allocated to EPI, the physical infrastructure and equipment, monitoring and information systems, the management and delivery of human resources and social mobilization.

UNICEF and WHO have adopted an operational approach to Reaching Every District (RED). This has been further adapted for PICs and appropriately named 'Reaching Every Island'. The five components of the approach are:

1. re-establish outreach services and prioritize those with most difficult access;
2. provide supportive supervision with onsite training by supervisors;
3. link community with service delivery and involve community members in planning, advocacy, implementation and assessment;
4. monitor and use data for action, chart doses, map population in each health facility; and
5. provide better planning and management of human and financial resources, and link with other programmes.
To improve immunization coverage, PICs must conduct regular performance reviews at subnational level, identify poorly performing districts and subdistricts, intensify monitoring and supervision and increase outreach in hard-to-reach areas by improving transport, training, supportive supervision and resource allocation.

2.9.3 Strategies for achieving high coverage in an SIA – Kiribati

Dr Alan Ruben, PIPS Temporary Adviser, presented the strategies for achieving high coverage during the SIA in Kiribati in early 2006. The EPI in Kiribati was under strain and measles vaccine coverage rates had fallen below 80%. With the introduction of measles-rubella (MR) vaccine into the Kiribati immunization schedule, an SIA using MR vaccine for children aged one to 14 years was undertaken with children aged 15 to 19 years immunized opportunistically. Vitamin A was given to children aged six months to six years, and deworming was carried out for children aged two years and older.

An overall coverage of 96% was achieved for children aged one to 14 years. This was primarily due to the exceptional work of the community health nurses. Additional factors included strong support from the Ministries of Health and Education, adequate time to prepare for the campaign, staff training, detailed island-level microplanning, provision of transport and a high level of assistance from development partners. UNICEF was primarily responsible for campaign coordination, WHO provided technical assistance, AusAID funded the campaign, and JICA provided cold chain equipment and additional training.

2.10 Review of country surveillance and coverage performance

PICs were asked to examine their surveillance systems, EPI policies, details of their immunization schedules and coverage performance using an evaluation tool. Partner agencies and technical advisers provided assistance to complete this task. At the completion of this exercise, all countries reported on the areas that required strengthening.

The majority of the PICs reported the need to strengthen (1) surveillance and (2) coverage data and monitoring. Countries requested assistance with strengthening all areas of surveillance, the timeliness of reporting from HBAS sites, as well as follow-up and investigation of vaccine preventable diseases of interest. Some of the countries requested assistance with expanding surveillance systems to include other diseases, e.g. congenital rubella syndrome and Hib.

The next most frequent area requiring assistance was coverage data and monitoring. Many countries had difficulty reporting accurate denominators and felt this was reflected in their reported coverage rates in both overreporting and underreporting. To improve this, countries requested assistance in strengthening all aspects of data and monitoring information. In addition to general monitoring, countries called for further assistance with reporting on the timeliness of birth dose of hepatitis B.

All countries reported two doses of MCV in their routine immunization schedules; however, there was great diversity in the length of time between doses. Through this exercise some countries identified measles susceptible populations accumulating.

Many countries requested assistance with the development of EPI policies. These included measles elimination, control of hepatitis B, general EPI and cold chain policies. One country highlighted that although the plans were in place, the challenge was in the implementation of these plans at health centre level. Countries expressed the need for the development of generic EPI policy documents that PICs can adapt to their own situation.
Finally, some countries planned the introduction of new vaccines and requested financial and logistical support.

PICs also reported that they would take this evaluation tool back to their countries to evaluate their EPI programmes.

2.11 Special interest session

2.11.1 Optimal tetanus protection

Dr Sigrun Roesel presented strategies to achieve optimal tetanus protection and acknowledged that WHO is currently finalizing an updated position paper on tetanus vaccines. The draft was recently endorsed by the Immunization Strategic Advisory Group of Experts (SAGE). The SAGE recommended to WHO that the goal of tetanus vaccination from maternal and neonatal tetanus elimination (MNTE) should be expanded to protect all persons throughout life.

A five-dose minimum childhood immunization schedule should be promoted. The primary series of three doses would be given in infancy, with a booster dose ideally at age four to seven years and another booster dose in adolescence (e.g. age 12 to 15 years). The exact timing of the booster doses should be flexible to take account of the most appropriate health service contacts in different countries, and integration with other vaccines and other interventions such as bednet distribution, vitamin A therapy, deworming, etc. In some countries, these boosters could be given through school-based approaches, but efforts to reach school non-attenders will be important. In addition to childhood vaccination programmes, an extra dose of tetanus vaccine for adults will provide additional assurance of protection. A sixth dose is therefore recommended for adults, e.g. in first pregnancy or as military recruits.

In accordance with the recommendations in previous position papers on diphtheria (2005), diphtheria-tetanus vaccine use is preferable to single antigen tetanus toxoid (TT) vaccine. In the future, inclusion of other antigens (e.g. pertussis) should be reviewed. Surveillance of tetanus cases (all ages) and of coverage of tetanus-containing vaccines in different age groups should be strengthened. Systems will be needed to document the number of doses received by an individual, so that number of doses required for women of childbearing age can be tailored to the number of doses received in the past.

2.11.2 CRS and infant immunization

Dr Susan Reef gave a presentation on congenital rubella syndrome (CRS) and infant immunization. Rubella is usually a mild rash illness in adults and children. However, when rubella infection occurs in early pregnancy, devastating consequences can occur. These include miscarriages, fetal death and infants born with a constellation of birth defects known as CRS. These birth defects include cataracts, heart defects and hearing impairment.

Rubella was a childhood disease in many countries in the pre-vaccine era. In recent outbreaks in Tonga and Samoa, rubella occurred mainly among children. Recent serosurveys showed that more than 80% of women of childbearing age were immune.

When introducing rubella-containing vaccine, the goal of the programme is the prevention of intrauterine infection that may result in CRS. Initially, there were two basic strategies that were used to introduce rubella-containing vaccine. The first strategy targets adolescent girls and women of childbearing age. This strategy prevents CRS by providing direct protection to the high-risk population but allows rubella to continue to circulate. The second strategy targets
vaccinating children. This strategy provides immunity to the cohorts where most susceptibles exist, resulting in diminishing rubella circulation and then subsequent elimination.

The most frequently used strategy is a combined strategy that targets both children and women of childbearing age. When implementing a rubella vaccinating programme, countries need to determine their rubella elimination goal and the timeframe to achieve this goal. When introducing rubella-containing vaccine, the biggest concern is the possibility that the introduction of infant vaccination with inadequate coverage may lead to an increase in CRS. Low routine coverage reduces the transmission of the rubella virus such that children may miss natural disease and vaccination and may enter reproductive age susceptible to rubella. Due to this concern, it is recommended that countries maintain a sustained coverage for rubella-containing vaccine of more than 80%. Several examples (Albania, the United States of America, and the United Kingdom.) were presented. These examples documented that rubella/CRS can be controlled or eliminated using current rubella vaccines and strategies. With the introduction of rubella-containing vaccine into the national programme, surveillance and monitoring are essential to guide vaccination programme activities.

2.11.3 Regional child survival strategy and links with EPI

Dr Sigrun Roesel presented an overview of the joint WHO/UNICEF Regional Child Survival Strategy and its links with EPI. She highlighted that the purpose of this joint strategy was to mobilize the resources of the two organizations most involved in child health to stimulate an accelerated drive to achieve Millennium Development Goal 4: reduce child mortality. The strategy offers a unified direction and a description of the actions necessary to successfully implement lifesaving interventions to guide countries in the Region. It can also serve as an advocacy document for focused and convergent programmes and donor coordination. This strategy focuses on children from birth to five years of age and advocates approaches that give every child the same chance for survival. The recommended essential care package includes immunization of children and mothers.

2.12 Vaccine security and logistics

2.12.1 Global vaccine market

Dr Osman Mansoor, on behalf of the UNICEF supply division, outlined the progress that had been made in improving vaccine security to address the vaccine shortage for traditional EPI vaccines. As a result, the supply of vaccine offered to UNICEF has increased from its low point in 2003, but there have been increases in the price of vaccines. Although the supply for several of the vaccines is tight, UNICEF has been able to continue to meet the demand for the traditional vaccines. The importance of accurate forecasts from countries was emphasized as a key component for achieving national and global vaccine security.

The newer DTP combination vaccines provide programmes a useful option of delivery of hepatitis B and Hib vaccines (e.g. DTPHepB, DTPHib, and DTPHepBHib). However, there is a substantial cost premium (about US$ 1 for Hepatitis B combinations and US$ 0.50 for Hib combinations) and limited supply (except for DTPHib). It is anticipated that the supply for the hepatitis B combinations will increase as additional manufacturers enter the market in 2006 or 2007, and it is hoped that prices will eventually drop as a result.

2.12.2 VII performance initiative to improve vaccine ordering

Dr Robyn McIntyre, UNICEF, explained that the purpose of the Vaccine Independence Initiative (VII) is (1) to assist countries towards self-sufficiency in vaccine planning, forecasting,
budgeting, funding and procuring, and (2) to ensure an uninterrupted supply of low-cost, high-quality, WHO-standard vaccines to each country. Components of the VII include vaccine procurement, a revolving fund that allows delayed payment and a means of assisting coordination of distribution and storage.

Currently, a number of issues exist with VII including: high turnover of country EPI focal points, poor communication links with countries, difficulties with vaccine ordering and forecasting that lead to supplementary orders, waiting time to receive order requests and payments, revolving fund ceilings exceeded because of new vaccines, debtors threatening the fund, high freight costs, difficulties with shipping, and quality monitoring issues.

Next steps are: to provide technical assistance in vaccine forecasting and ordering; to deliver vaccines twice a year in some countries; to ensure vaccine transport; to ensure storage and packaging guidelines are rigorously adhered to; and to increase support to countries in expanding vaccines management system and cold chain maintenance and in training and vaccine management in all PICs in collaboration with JICA and other partners.

2.12.3 Report from VII assessment

VII is a highly successful strategy for facilitating the procurement and regular supply of high-quality, safe, low-cost vaccines to participating countries. A review of VII was suggested at the EPI meeting in Noumea in 2005. Because PICs are small and have no possibility of manufacturing vaccines or obtaining a good deal to purchase vaccines on the open market as individual countries, some ongoing mechanism for a pooled vaccine procurement process is essential.

Dr John Clements, short-term consultant, UNICEF, described how the initiative is basically working well in PICs. Specific operational issues are continually being addressed through interaction between individual countries and UNICEF Fiji.

From his analysis, he discussed that there were three possible ways forward for the future of the VII:

1. phase out VII at some date in the near future and move to up-front payment for vaccine procurement;
2. maintain VII as it is; and
3. expand VII.

Dr Clements recommended that VII be expanded in the following ways to adapt to the new vaccines environment where the cost of vaccines are rising dramatically:

1. Effective immediately, donors should be asked to make an additional annual contribution to the revolving fund, building it up to permit higher ceilings for each country. Because it is very difficult to forecast precisely what the demand will be and what the market price of each new vaccine will be in two to five years, it is hard to model exactly what the revolving fund needs will be. For this reason, it is recommended that the donors be asked to make a decision at regular intervals about how much they need to contribute to the revolving capital fund.

2. VII should embrace more than the procurement of vaccines. It already includes the purchase of AD syringes and safety boxes. However, VII should take advantage of the
opportunity, of the goodwill generated by VII, and of the contacts that UNICEF and donors have with countries to build it further. It is recommended that a new name be created for this initiative such as “VII-2” or “VIP” (Vaccines and Immunization in the Pacific). As well as vaccine procurement, this initiative would include training in vaccine demand forecasting, capacity-building in financial management, financial sustainability for immunization programmes, microplanning for campaigns, stock control, minimizing and proper handling of adverse events, vaccine safety and safe waste disposal, cold chain maintenance, open vial policy, vaccine vial monitors, minimization of wastage rates, delivery of the birth dose of hepatitis B vaccines, and how to handle each new vaccine as it is introduced. In other words, it would generate support for activities that would ensure the best use of vaccines at the programme level. The main activity would be technical support, which might be provided by UNICEF and WHO. Capital items and running costs would be paid for by countries themselves or through bilateral donors.

2.12.4 Strengthening cold chain systems – lessons from J-PIPS

Dr Kouichi Morita, Chief Adviser to the Japanese support to the Pacific Immunization Programme Strengthening (J-PIPS) project, affirmed that the J-PIPS project supports 13 countries in the Pacific in the three key areas of EPI cold chain management, logistics and waste management. The J-PIPS project has been running for one year. To date, the project has completed eight country cold chain / logistic surveys. These surveys noted the maintenance of cold chain equipment required significant improvement in some countries. As with other areas in EPI, there is great diversity in the cold chain equipment requirements of PICs. In collaboration with WHO, UNICEF and the ministries of health of PICs, the J-PIPS project will develop five-year plans for countries to repair and replace cold chain equipment.

JICA also recognizes the importance of capacity-building in the form of training in PICs and will conduct regional, national and subnational training courses on cold chain in conjunction with Member States and PIPS partners. In-service training on the cold chain is essential to maintain levels of technical expertise in country. Acknowledging this, the J-PIPS project will conduct in-country training on cold chain management in 2006 and 2007, including the solar-powered refrigeration system.

To improve the maintenance of the cold chain at national level, a regional training workshop was conducted in Fiji in 2005 with participants from 13 countries.

Previously, cold chain equipment and supplies were supported by WHO, UNICEF and CDC based on requests from governments. The J-PIPS project has developed an inventory to minimize redundancy of equipment and harmonize cold chain equipment ordering between countries and donor agencies.

Lack of cold chain equipment and the continued use of domestic refrigerators need to be addressed. A centralized inventory system at national level will assist countries to keep track of the condition of their cold chain equipment. There is a continued need to improve the skills and knowledge of cold chain managers and vaccine providers in order to increase the life of the cold chain in the field. Inventory systems need ongoing review and management, a five-year cold chain replacement plan and preventative maintenance of cold chain equipment.

2.12.5 Management of waste from injection material at district level

Dr Yoshikuni Sato explained that the management of waste management from injection material at district level is essential to ensure that the risk of exposure to the health worker, client and community are reduced. The responsibility of health care waste rests with all levels of
health service delivery. Availability of proper waste treatment and disposal facilities outside the health care institution affects the choice of waste management methods appropriate for that setting. There must be coordination at all levels of health systems in planning for appropriate waste disposal. PICs are encouraged to review the Medical Waste Management Guidelines available through WHO.

Waste disposal systems vary among countries and are influenced by the size of health facility, access to resources and geographical isolation. Burial and burning are two options for disposing EPI waste in PICs. Incineration is the best method; however, this may not be feasible at smaller health centres. Health centres are encouraged to share incinerators wherever appropriate.

J-PPS will assist countries in developing waste management plans, training staff to manage and operate incinerators, continuing to provide regional and country training and coordinating the supply of incinerators utilizing available assistance schemes.

2.13 Country vaccine forecasting and management

PICs were asked to examine their vaccine forecasting, planning, cold chain and safety management systems using an evaluation tool. Assistance was provided by partner agencies and technical advisers to complete this task.

Waste management was the most frequently reported area that PICs requested assistance with. The next most frequent area was vaccine forecasting and ways to reduce vaccine wastage. The cold chain was another area countries requested support in strengthening, as well as general maintenance, management and the purchasing of new equipment. Training in all areas of EPI was also requested. Many countries reported the lack of technical expertise in the development and delivery of training in all aspects of EPI.

2.14 EPI communication and social mobilization

2.14.1 Status of communication plans

Mr Daniel Dravet, UNICEF, presented the status of PICs communication plans and highlighted that evidence-based communication planning is best carried out from the analysis of hard facts. This results in communication solutions that are tailor-made to respond to the specific needs of any EPI programme. They respect the diversity of various target groups, focus on behaviours and making use of clear indicators to assess the success or failure of the interventions. In the past year, UNICEF supported the development of evidence-based EPI communication strategies in Cook Islands, Solomon Islands, and Vanuatu. Evidence is derived from national immunization coverage data, subnational immunization coverage data, KAP (knowledge, attitudes and practices regarding immunization) survey data on service providers (supply side), KAP survey data on child caretakers (demand side), EPI policy and data on media reach.

The communication strategies were developed through a series of three to four day workshops conducted in each country. The workshops were attended by EPI programme managers, health promotion staff and health information system staff. The strategy framework is made up of advocacy, which seeks to obtain political and social commitment or policy change; social mobilization, for building alliances with various groups; and programme communication, which is targeting the reinforcement or the change in behaviour at the individual level. The method by which the communication strategy is carried out involves a review and analysis of targets and policies, an analysis of the evidence, problem identification and prioritization, causal
analysis for each problem, identification of communication solutions to the problems, development of a strategy and its implementation plan.

The following were the main lessons learnt:

(1) Throughout the communication planning exercises in all countries, it was found that coverage data and other evidence were often not reliable enough to develop the strategies, especially the provincial strategies.

(2) There is thus a need to improve the quality of coverage data and to conduct more operational research on beneficiaries' knowledge, attitudes and practices.

(3) The EPI communication strategies that were developed can be considered as work in progress and the planning framework may be used to continuously refine them.

(4) The planning exercise also showed the need to use all strategic components of the framework (advocacy, social mobilization and behaviour change communication). So far, most EPI programmes make use of the behaviour change communication component only, targeting the behaviour of individuals.

(5) Pilot planning and implementation of strategies at subnational level in the low coverage provinces may be considered in Vanuatu and Solomon Islands to test the effectiveness of the strategies.

2.14.2 The use of a communication strategy for the Kiribati SIA

Dr Robyn McIntyre, UNICEF, highlighted that the communication strategy developed for the SIA conducted in Kiribati in 2006 was an important part of the success of the SIA. The objectives of the communication strategy were to achieve a high level of political and community support for the campaign, ensure all families are aware of the problem and understood the reasons for measles immunization, to inform the community of when and where the vaccine would be available and to take action to have children immunized.

The communication strategy focused on the use of interpersonal communication networks to assist with the dissemination of information such as church, women's and youth groups, schools, local councils and the Peace Corps. In addition, there were many radio spots with interviews and the development of a jingle. Finally there were television advertisements, bus banners, a presentation by the drama group Te Toamatoa, T-shirts and an official opening ceremony and launch. A MOH-MARVIN video was taken into schools and maneabas, and used as entertainment and to stimulate discussion about measles. The communication strategy also strengthened capacity building within the Health Promotion Unit in the areas of graphic skills, development of scripts and working with community.

Overall the campaign was very successful and achieved a very high profile in Kiribati due to the highly visible communication strategy utilizing many different communication approaches. The next step is to address routine EPI communication strategies.

2.15 PIPS Partners Coordination Meeting

Please see Annex 3 for the list of participants to the PIPS Partners Coordination Meeting held in the afternoon of 11 May 2006 and main issues discussed during the meeting.
2.16 Planning and training

2.16.1 Microplanning at the district level

Mr Richard Duncan presented the development of district-level microplans and emphasized that they are essential to improve a country's routine EPI services and coverage. Microplans should identify the numbers and location of children, how EPI services are going to reach them, the quantity of supplies needed to reach them, and details about the timing of immunization services.

In order to develop a microplan, the district will require:

(1) a map of the health zone which includes details of villages, schools and health facilities;

(2) population data on the numbers of infants, children and mothers;

(3) a cold chain inventory including details on equipment models, working condition and locations;

(4) current vaccination coverage rates;

The following steps are involved in the development of a microplan:

(1) Develop a map of the area.

(2) Decide who will “reach” the population and how, which includes details on transport needs and communication needs.

(3) Calculate the supplies needed.

(4) Develop a health centre plan.

(5) Develop a health centre workplan.

(6) Monitor progress with an immunization monitoring chart.

(7) Use data to evaluate services.

(a) Compile data.

(b) Analyse data to identify problems.

(c) Decide activities needed to solve problems with existing resources or extra resources!

(d) Go back to workplan and add these and other new activities (measles SIA, etc.).

(e) Prioritize the activities on the workplan.

All the information required to conduct detailed microplanning is in the current edition of *Immunization in Practice* available through WHO.

Dr Yasuhiro Kamiya, J-PIPS, presented the J-PIPS project training courses at regional, national and subnational levels which covers topics such as vaccine management, vaccine logistics, safe injection including AD syringes and waste management, cold chain maintenance and an EPI overview including target diseases and vaccines. The objectives of the five-year project are:

1. to combine training with provision of equipment necessary for EPI programmes;
2. to coordinate with other agencies for synergistic affect, avoiding duplication;
3. to promote sustainability of training capacity through regional and country ownership after 2008; and
4. to establish an Executive Board for the EPI Training Programme to direct the PIPS Coordinating Board.

The first regional training workshop was conducted in Fiji in December 2005 with 43 participants from 13 countries. Country-level training was conducted in Samoa in March 2006 and preparations are underway for training in Fiji, Kiribati, Tonga, Solomon Islands, Vanuatu, Tuvalu and Palau. The second regional training workshop is planned for November 2006 and country-level training is planned for the Cook Islands, the Marshall Islands and Tonga during 2006.

Conducting training courses in PICs poses many challenges and there is need for the development of strategic and comprehensive workplans for training. There is also a shortage of EPI staff in the ministries of health and they have competing priorities as they are involved in other programmes. Many countries lack funds for organizing a training workshop and lack equipment to use in training. There is a need to expand training subjects to meet needs, to coordinate training with pre-service training and training institutes and, importantly, to strengthen coordination with other agencies.

The J-PIPS project is exploring innovative and effective training approaches to conduct the training courses. These approaches include competency-based learning; learner-centred, interactive, participatory workshops; problem-solving approaches, client-oriented, provider-efficient, peer-learning process coupled with sharing best practices and lessons learnt in the field. All training courses will attempt to enhance motivation and human resource development and encourage a management of change.

All training courses are assessed for effectiveness and the aim is to transfer the skills and capacity to organize the training to PICs before the end of the project.

2.18 Closing ceremony

Dr Yang Baoping thanked participants for their hard work during the workshop, noting particularly the country presentations. He also remarked about the SRCC involvement at the workshop and how this provided many benefits for PICs. He said that increased interest and participation in the workshop by partner agencies would benefit PICs. He encouraged the sharing of information on new and underutilized vaccines that would contribute to a reduction in under-five mortality.
The integration of EPI with other child survival strategies and Millennium Development Goals demonstrates a sharing of visions for EPI. Dr Yang concluded by highlighting the excellent workshop conclusions and recommendations, all of which would assist in the coming year's progress in EPI for the Region.

Mr Basil Rodriques, Regional Immunization Officer of UNICEF, was pleased to note a difference from previous meetings of more participant involvement. He highlighted the opportunity for PICs to have their own informal discussion via e-mail. He noted the progress observed in the PICs was greater than anywhere in Region. He thanked all participants and colleagues from the Suva Office for arranging the meeting.

Sr Sela Paasi, National EPI Coordinator of Tonga, thanked UNICEF, WHO, JICA, SPC, AusAID and NZAID for their support of EPI in PICs and noted the progress of this workshop on improving the quality of EPI in the Pacific. She felt a sense of partnership had developed from this meeting and noted that this would assist in improving collaboration among EPI managers in PICs. Finally, she noted that, by improving the health of all our children, we would be able to achieve the Millennium Development Goal.

3. CONCLUSIONS AND RECOMMENDATIONS

The second PIPS workshop highlighted progress made by PICs and PIPS in strengthening immunization services. Challenges still remain including the need to reach all children, introduce new vaccines, improve surveillance and sustain high population immunity. The recently endorsed GIVS and twin regional immunization goals for measles and hepatitis B were seen as providing direction for addressing these issues. EPI can also serve as a structure for child survival to help achieve Millennium Development Goal 4, particularly, by improving the proportion of one-year-old children immunized against measles.

Increased political, financial and technical support within countries and from partners will be required. The meeting highlighted the assistance available through donor agencies through the PIPS coordinating mechanism.

The participants made the following recommendations:

Training

(1) Current regional training opportunities should be expanded to include all PICs and to incorporate all topics relevant to EPI. Regional training should be conducted annually with coordination between and among countries and donor agencies to ensure that programme managers and health care workers' skills in all PICs are updated regularly.

(2) EPI core topics may include: cold chain management, injection safety, SIA microplans, EPI data management, HBAS system, and waste management.

Coverage and data management

(3) PIPS partners should develop and provide an EPI data management system to enable PICs to strengthen their data collection and management, e.g. database – access programme.
(4) A system of lifetime immunization cards should be established.

Policy planning

(5) PIPS partners should develop templates and provide them to PICs to assist in developing their respective plans/policies (e.g. national EPI, measles, hepatitis B, waste management plan, EPI communication plan) within three months. PIPS partners and donor agencies will provide templates to PICs and all PICs should provide PIPS with a request of the templates needed. Countries should share the plans developed among them.

Surveillance

(6) Donor partners should provide technical assistance to PICs that do not have the appropriate surveillance and support systems for vaccine preventable diseases (e.g. technical assistance, diagnostic services).

EPI schedule and new vaccines

(7) Countries in coordination with technical agencies should evaluate their existing EPI schedules to ensure optimization of schedules and antigens. All countries should work towards adding Hib and rubella vaccines in preparation for including pneumococcal, rotavirus and other new vaccines into their schedules.

Outbreak response

(8) Donor partners should assist PICs to incorporate island-specific VAPID outbreak response plans (e.g. polio importation plan) into their communicable surveillance and response plans.

Others

(9) Through e-mail forum (IMMUNE/VAC NET/PIPS NET), input from EPI managers will be sought for content and format of the subsequent PIPS meetings. A designated EPI manager will serve as the representative for PICs. Evaluation of the PIPS meeting will be analysed and results and suggestions will be incorporated into next year’s meeting.

(10) UNICEF should share with countries and partners their vision for VII in the Pacific, based on the VII assessment.

(11) EPI programme managers and donor agencies should utilize all national, regional and international opportunities (e.g. the prime minister’s meeting in Japan in May 2006) to actively advocate the benefits that EPI programmes can provide in protecting children and mothers in PICs, and the benefits EPI provides in meeting the Millennium Development Goals.

(12) PICs should establish and coordinate an ‘Immunization Week’ in the Pacific using the existing template.
# SECOND PACIFIC IMMUNIZATION PROGRAMME STRENGTHENING (PIPS) WORKSHOP

## Nadi, Fiji

8-12 May 2006

## TENTATIVE TIMETABLE

<table>
<thead>
<tr>
<th>Time</th>
<th>Monday, 8 May</th>
<th>Time</th>
<th>Tuesday, 9 May</th>
<th>Time</th>
<th>Wednesday, 10 May</th>
<th>Time</th>
<th>Thursday, 11 May</th>
<th>Time</th>
<th>Friday, 12 May</th>
</tr>
</thead>
<tbody>
<tr>
<td>07:30- 08:00</td>
<td><strong>REGISTRATION</strong></td>
<td>08:00- 09:30</td>
<td>10:00- 12:00</td>
<td>10:30- 12:00</td>
<td>13:30- 15:00</td>
<td>15:00- 16:00</td>
<td>16:00- 17:00</td>
<td>17:30- 18:30</td>
<td>18:30- 19:30</td>
</tr>
<tr>
<td>08:00- 09:30</td>
<td><strong>Opening Ceremony</strong></td>
<td>09:30- 10:00</td>
<td>10:00- 12:00</td>
<td>13:30- 15:00</td>
<td>15:00- 16:00</td>
<td>16:00- 17:00</td>
<td>17:30- 18:30</td>
<td>18:30- 19:30</td>
<td>19:30- 20:30</td>
</tr>
<tr>
<td>10:00- 12:00</td>
<td><strong>Workshop Overview</strong></td>
<td>12:00- 13:30</td>
<td>13:00- 15:00</td>
<td>15:00- 16:30</td>
<td>16:30- 18:00</td>
<td>18:00- 19:30</td>
<td>19:30- 20:30</td>
<td>20:30- 21:30</td>
<td>21:30- 22:30</td>
</tr>
<tr>
<td>13:30- 15:00</td>
<td><strong>Country Reports</strong></td>
<td>15:30- 17:00</td>
<td>17:00- 18:30</td>
<td>18:30- 20:00</td>
<td>20:00- 21:30</td>
<td>21:30- 22:30</td>
<td>22:30- 23:30</td>
<td>23:30- 24:00</td>
<td>24:00- 00:00</td>
</tr>
<tr>
<td>15:00- 16:00</td>
<td><strong>Country Reports (cont.)</strong></td>
<td>16:00- 17:30</td>
<td>17:30- 19:00</td>
<td>19:00- 20:30</td>
<td>20:30- 22:00</td>
<td>22:00- 23:30</td>
<td>23:30- 00:00</td>
<td>00:00- 01:30</td>
<td>01:30- 03:00</td>
</tr>
<tr>
<td>17:30- 19:00</td>
<td><strong>Summary of discussions</strong></td>
<td>18:30- 20:00</td>
<td>20:00- 21:30</td>
<td>21:30- 23:00</td>
<td>23:00- 00:30</td>
<td>00:30- 02:00</td>
<td>02:00- 03:30</td>
<td>03:30- 05:00</td>
<td>05:00- 06:00</td>
</tr>
<tr>
<td>19:00- 20:00</td>
<td><strong>Country Reports</strong></td>
<td>20:00- 21:30</td>
<td>21:30- 23:00</td>
<td>23:00- 00:30</td>
<td>00:30- 02:00</td>
<td>02:00- 03:30</td>
<td>03:30- 05:00</td>
<td>05:00- 06:00</td>
<td>06:00- 07:30</td>
</tr>
</tbody>
</table>

## 1. Opening Ceremony
- Opening remarks (MOH, WHO, UNICEF)
- Self-introduction
- Election of officers
- Administrative Announcements
- Group photograph

## 2. Workshop Overview
- Global & Regional EPI Overview
- Global EPI overview (including global PEl update)
- Regional EPI overview and update on new target date for measles & hepatitis B control
- PIPS 2005 Recommendations

## 3. Measles Outbreak Response
- Measles importation response when is an SIA needed/ineffective
- Measles outbreak in Fiji
- Communication and social mobilization in an outbreak, lessons in Fiji
- HBAS system performance during the measles outbreak

## 4. EPI Target Disease Status and Surveillance in the Pacific
- EPI surveillance summary
- AFP and SRCC update
- OPV Cessation and PEl laboratory containment
- Strengthening laboratory surveillance for AFR-OVBS

## 5. Routine Immunization Services
- Overview of routine infant immunization schedules
- Improving HepB birth dose delivery systems
- Measles elimination in the Pacific, what is needed by 2012

## 6. Expanded the Benefits from Routine Immunization Services
- Global vaccine market
- VII performance and mechanisms to improve vaccine ordering

## 7. Country Reports
- EPI disease cases, coverage, key 2005 activities, 10 year achievements

## 8. Expanded the Benefits from Routine Immunization Services (cont.)
- HIS vaccine
- WHO NVP guidelines
- SRCC meeting feedback

## 9. Expanded the Benefits from Routine Immunization Services (cont.)
- PIPs Partners Coordination Meeting

## 10. Conference Paper Sessions
- Vaccine Security and Logistics (cont.)
- PIPs Partners Coordination Meeting

## 11. Networked Paper Sessions
- Report from UNICEF V/1 Assessment
- Strengthening cold chain management systems - lessons from PIPS
- Management of injection waste at district level

## 12. EPI Communication and Social Mobilization Status of country communication plans
- Process of developing evidence-based communication strategy

## 13. EPI Communication and Social Mobilization
- Status of country communication plans
- Process of developing evidence-based communication strategy

- Discussion

## 15. EPI Communication and Social Mobilization (cont.)
- Status of country communication plans
- Process of developing evidence-based communication strategy

## 16. EPI Communication and Social Mobilization (cont.)
- Status of country communication plans
- Process of developing evidence-based communication strategy

## 17. PIPs Partners Coordination Meeting
- PIPs Partners Coordination Meeting


## 19. Conclusions and Recommendations
- Summary of discussions

## 20. Conclusions and Recommendations
- Summary of discussions

## 21. Conclusions and Recommendations
- Summary of discussions

## 22. Closing Ceremony

---

**ANNEX 1**

**SECOND PACIFIC IMMUNIZATION PROGRAMME STRENGTHENING (PIPS) WORKSHOP**

**Nadi, Fiji**

**8-12 May 2006**

**English only**
PROVISIONAL LIST OF PARTICIPANTS, TEMPORARY ADVISERS, OBSERVERS/REPRESENTATIVES AND SECRETARIAT

1. PARTICIPANTS

AMERICAN SAMOA
Dr Saipele Fuimaono
Maternal Child Health Pediatrician
Department of Health
American Samoa Government
Pago Pago, American Samoa 96799
Tel. no.: (684) 633 5872
Fax no.: (684) 633 5379
E-mail: y3masunu@yahoo.com

COOK ISLANDS
Ms Raiata Heather
Chief Public Nurse
Ministry of Health
P.O. Box 109
Rarotonga, Cook Islands
Tel. no.: (682) 29110
Fax no.: (682) 29100
E-mail: paruru@health.gov.ck

FIJI
Dr Josaia Samuela
National EPI Manager
Ministry of Health
Dinem House, 88 Amy Street, Toorak
Suva, Fiji
Tel. no.: (679) 330 6177
Fax no.: (679) 330 6163
E-mail: info@health.gov.fj

GUAM
Ms Annette Aguon
Communicable Disease Control Coordinator III
Department of Public Health and Social Services
P.O. Box 2816
Hagatna, Guam 96932
Tel. no.: (671) 735 7143/7160
Fax no.: (671) 734 1475
E-mail: alaguon@dphss.govguam.net
Annex 2

KIRIBATI
Dr Airambiata Kaitara Metai
Public Health Consultant
P.O. Box 268, Bikenibeu
Tarawa, Kiribati
Tel. no.: (686) 28493 / 28396
Fax no.: (686) 238501
E-mail: airam_metai@tskl.net.ki

MARSHALL ISLANDS
Ms Mailynn Konelios-Lang
Primary Health Care Administrator
Ministry of Health
P.O. Box 1622
Majuro, Marshall Islands 96960
Tel. no.: (692) 625 8457 / 455 0263
Fax no.: (692) 625 4372
E-mail: phadmin@ntamar.net

MICRONESIA,
FEDERATED STATES OF
Ms Louisa A. Helgenberger
Immunization and Communicable Diseases Program Manager
Department of Health, Education and Social Affairs
Division of Health Services
P.O. Box PS-70
Palikir, Pohnpei 96941
Federated States of Micronesia
Tel. no.: (691) 320 2619 / 320 2643
Fax no. (691) 320 5263
E-mail: lahelgenberger@mail.fm

NAURU
Ms Isabella Amwano
EPI Programme Manager
NGH Hospital
Ministry of Health
Nauru
Tel. no.: 444 3881 / 444 3106
E-mail: isra2a234@hotmail.com

NEW CALEDONIA
Dr Jean-Paul Grangeon
Medecin Inspecteur
Chef Du Service Des
Actions Sanitaires
Service Des Actions Sanitaires
DASS-NC
BP N4 98851 Noumea-Cedex
New Caledonia
Tel. no. (687) 243 700
Fax no. (687) 243 702
E-mail: jeannot.grangeon@gouv.nc

NIUE
Mrs Minemaligi Pulu
Maternal Child Health Charge Nurse
Department of Health
P.O. Box 33, Alofi, Niue
Tel. no.: (683) 4100
Fax no.: (683) 4265
E-mail: mine_pulu@hotmail.com
phcnurse@mail.gov.nu
Ms Mariana Sablan  
Vaccine for Children/Immunization Programme Manager  
Department of Public Health  
P.O. Box 500409  
Saipan, MP 96950  
Commonwealth of the Northern Mariana Islands  
Tel. no. (670) 236 8733  
Fax no. (670) 236 8700  
E-mail: mariana@pticom.com

Ms Ann Klass  
Primary Health Care / Immunization Programme Manager  
Ministry of Health  
P.O. Box 6027  
Koror, Palau 96940  
Tel. no.: (680) 488 4804/05  
Fax no.: (680) 488 5618  
E-mail: chc@palaunet.com

Mrs Maatasesa Samuelu-Matthes  
Principal Nurse  
Integrated Community Health  
Ministry of Health  
Private Mail Bag, Apia, Samoa  
Tel. no.: (685) 21212 Ext 372  
Fax no.: (685) 30970  
E-mail: MaatasesaS@health.gov.ws

Mr Raymond Mauriasi  
National EPI Coordinator  
Ministry of Health  
P.O. Box 349, Honiara  
Solomon Islands  
Tel. no (677) 24260.  
Fax no. (677) 24260  
E-mail: repro@solomon.com.sb

Ms Faimanifo Peseta  
EPI Coordinator  
Tokelau Health Department  
P.O. Box 865, Apia, Samoa  
Tel. no. (685) 20822  
Fax no. (685) 27161  
E-mail: talo.health@lesamoa.net  
fpmpeseta@lesamoa.net

Sr Sela Sausini Paasi  
National EPI Coordinator  
Supervising Public Health Sister  
Ministry of Health  
P.O. Box 59  
Nuku’alofa, Tonga  
Tel. no. (676) 25630  
Fax no. (676) 20291  
E-mail: spaasi@health.gov.to
Annex 2

TUVALU

Ms Eline Soloseni
EPI Coordinator/Public Health Nurse
Ministry of Health
P.O. Box 36, Funafuti, Tuvalu
Tel. no.: (688) 20765/20480
Fax no.: (688) 20481
E-mail: tagialofa@yahoo.com

VANUATU

Mr Leonard Tabilip
National EPI Coordinator
Department of Health
PMB 009, Port Vila, Vanuatu
Tel. no.: (687) 22512
Fax no.: (687) 26204
E-mail: ltabilip@vanuatu.gov.vu

WALLIS AND FUTUNA

Dr Marie Charle Subes
Médecin de Prévention
Agence de Santé de Wallis et Futuna
BP4G, Mata'Utu 98600
Wallis et Futuna
Tel. no.: +681 72 16 96
Tel. no.: +681 72 16 96
E-mail: mariesubes@yahoo.fr

2. TEMPORARY ADVISERS

Dr Tilman A. Ruff
Associate Professor
Faculty of Medicine, Dentistry and Medical Sciences
Nossal Institute for Global Health
University of Melbourne
52 Sussex Street, Brighton
Victoria 3186, Australia
Tel. no. (613) 9592 8643
Fax no. (613) 9592 4682
E-mail: tar@unimelb.edu.au

Dr Alan Ruben
Associate Professor
Northern Territory Clinical School
P.O. Box 752, Nightcliff
Northern Territory, Australia 0814
Tel. no.: (618) 8985 5194
Fax no.: (618) 8985 3024 and 8922 8248
E-mail: alan.ruben@epistat.com.au

Dr Heath Kelly
Head, Epidemiology Unit
Victorian Infectious Diseases Reference Laboratory (VIDRL)
Locked Bag 815, Carlton South 3053
Victoria, Australia
Tel. no.: (613) 9342 2608
Fax no.: (613) 9342 2665
E-mail: heath.kelly@mh.org.au
3. SUB-REGIONAL COORDINATING COMMITTEE MEMBERS

Dr Lisi Tikoduadua  
Consultant Paediatrician  
Department of Paediatrics  
Colonial War Memorial Hospital  
Suva, Fiji  
Tel. no.: (679) 3 304 600  
Fax no.: (679) 3 300 462  
E-mail: ltikoduadua@health.gov.fj

Dr Isamu J. Abraham  
Public Health Practitioner and Retired Government Health Secretary/Director  
P.O.B. 504815, Saipan, MP 96950-0586  
Commonwealth of the Northern Mariana Islands  
Tel. no.: (670) 235 1083; (670) 483 4744  
E-mail: samu_abraham@hotmail.com  
samujabraham@yahoo.com

Dr Eliane Chungue  
Institut Pasteur de Madagascar  
BP 1274 -101- Antananarivo  
Madagascar  
Tel. no.: (0026120) 22 412 72 (poste 511)  
Fax no.: (00261 20) 22 407 17  
E-mail: echungue@pasteur.mg

Dr David M. Morens  
National Institutes of Health  
6610 Rockledge Drive, Room 4097  
Bethesda, Maryland 20892-6603  
United States of America  
Tel. no.: (301) 496 7453  
Fax no.: (301) 480 1594  
E-mail: dmorens@niaid.nih.gov

4. SHORT-TERM CONSULTANTS

Ms Kylie Maree Jenkins  
Short-term Consultant  
P.O. Box S6, Superfresh, Tamavua  
Suva, Fiji  
Tel. no.: 332 3593  
E-mail: akjenkins@connect.com.fj

Dr John Clements  
Short-term Consultant  
24 Millbank Drive, Mount Eliza  
Victoria 3930, Australia  
E-mail: john@elem.com.au
### 5. OBSERVERS / REPRESENTATIVES

| **AUSTRALIAN AGENCY FOR INTERNATIONAL DEVELOPMENT** | Ms Carrie-Ann Best  
Second Secretary for Development Cooperation  
Australian High Commission  
PO Box 214  
Suva, Fiji  
Tel. no.: (679) 338 8281  
Fax no.: (679) 338 2695  
Email: carrie-anne.best@dfat.gov.au |
|---|---|
| **GOVERNMENT OF FIJI** | Mr Peter Zinck  
Chief Pharmacist  
Ministry of Health  
Lot 1, Jerusalem Road, Vatuwaqa  
Suva, Fiji  
Tel. no.: (679) 338 8000  
Fax no.: (679) 338 8003  
E-mail: pzinck@health.gov.fj |
|  | Mr Saula Volavola  
Social Marketing Manager  
National Centre for Health Promotion  
Ministry of Health  
Suva, Fiji  
Tel. No.: (679) 332 0844  
Fax no.: (679) 3320 746  
E-mail: sauv63@yahoo.com.au |
| **FIJI HEALTH SECTOR IMPROVEMENT PROGRAMME** | Associate Professor Will Parks  
Senior Adviser Public Health & Health Promotion  
FHSIP, Ministry of Health  
Suva, Fiji Islands  
Tel. no.: (679) 999 4326  
Fax no.: (679) 330 1536  
E-mail: will.parks@jtai.com.au  
parks_will@hotmail.com |
| **FIJI SCHOOL OF MEDICINE** | Dr Louise Martin  
Paediatrician  
Lautoka Hospital  
Lautoka, Fiji  
Tel. no.: (679) 666-0399  
Fax no.: (679) 665-1488  
E-mail: l.martin@fsm.ac.fj |
| **JAPAN INTERNATIONAL COOPERATION AGENCY FIJI OFFICE** | Dr Hisashi Suzuki  
Assistant Resident Representative  
Japan International Cooperation Agency  
7th Floor Dominion House  
Private Mail Bag  
Suva, Fiji  
Tel. no.: (679) 330 2522 |
Fax no.: (679) 330 2452
E-mail: suzuki.hisashi@jica.go.jp

GOVERNMENT OF THE COMMONWEALTH OF THE NORTHERN MARIANA ISLANDS
Dr Jean-Paul Chaine
Region Epidemiologist for the Western Pacific
Department of Health
P.O. Box 500409, Saipan MP 96950
Commonwealth of the Northern Mariana Islands
Tel. no.: (670) 236 8733
Fax no.: (670) 236 8700
E-mail: jpchaine22@yahoo.com

GOVERNMENT OF THE FEDERATED STATES OF MICRONESIA
Mr Wincener David
Director, Pohnpei State Health Services
Nett, Pohnpei 96941
Federated States of Micronesia
Tel: no.: (691) 320 – 2614 / 320 3805
Fax no.: (691) 320 5394
E-mail: psdhs@mail.fm
wd48@hotmail.com

UNIVERSITY OF MELBOURNE
Dr Fiona Russell
The Centre for International Child Health
Department of Paediatrics
Fiji Pneumococcal Project
P.O. Box 17633
Suva, Fiji
Tel. no.: (679) 331-7670, 331 7671
Fax no.: (679) 331-7673
E-mail: fionarussell@connect.com.fj

VICTORIAN INFECTIOUS DISEASES REFERENCE LABORATORY
Dr Michaela Riddell
NHMRC Sidney Sax Fellow and
Senior Laboratory Epidemiologist
Epidemiology Unit
Victorian Infectious Diseases Reference Laboratory (VIDRL)
10 Wreckyn Street, North Melbourne
Victoria 3051, Australia
Tel. no.: (613) 9342 2686
Fax no.: (613) 9342 3930
E-mail: michaela.riddell@mh.org.au

6. SECRETARIAT
Dr Yang Baoping
Regional Adviser
Expanded Programme on Immunization
World Health Organization
Regional Office for the Western Pacific
United Nations Avenue
1000 Manila, Philippines
Tel no. (632) 528 8001
Annex 2

WHO/SOUTH PACIFIC

Fax no.: (632) 521 1036
E-mail: yangb@wpro.who.int

Dr Yoshikuni Sato
Medical Officer
Expanded Programme on Immunization
World Health Organization
Regional Office for the Western Pacific
United Nations Avenue
1000 Manila, Philippines
Tel no.: (632) 528 8001
Fax: no: (632) 521 1036
E-mail: satoy@wpro.who.int

Dr Sigrun Roesel
Medical Officer
Expanded Programme on Immunization
World Health Organization
Regional Office for the Western Pacific
United Nations Avenue
1000 Manila, Philippines
Tel no.: (632) 528 8001
Fax: no: (632) 521 1036
E-mail: roesels@wpro.who.int

Dr Ernest Smith
Medical Officer
Expanded Programme on Immunization
World Health Organization
Regional Office for the Western Pacific
United Nations Avenue
1000 Manila, Philippines
Tel no.: (632) 528 8001
Fax: no: (632) 521 1036
E-mail: smithc@wpro.who.int

Dr Chen Ken
WHO Representative in the South Pacific
WHO Representative's Office
Level 4 Provident Plaza One
Downtown Boulevard
33 Ellery Street
Suva, Fiji
Tel. no.: (679) 330 4600
Fax: no: (679) 330 4631
E-mail: chenk@sp.wpro.who.int

Dr Jacob Kool
Medical Officer
WHO Representative's Office
Level 4 Provident Plaza One
Downtown Boulevard
33 Ellery Street
Suva, Fiji
Tel. no.: (679) 330 4600
Fax: no: (679) 330 4631
E-mail: koolj@sp.wpro.who.int
Mr Richard Duncan  
Short-term Professional  
Expanded Programme on Immunization  
WHO Representative’s Office  
Level 4 Provident Plaza One  
Downtown Boulevard  
33 Ellery Street  
Suva, Fiji  
Tel. no.: (679) 330 4600  
Fax no.: (679) 330 4631  
E-mail: duncanr@sp.wpro.who.int

Dr Osman David Mansoor  
Senior Adviser EPI  
UNICEF  
3 UN Plaza  
New York, NY 10017  
United States of America  
Tel. no.: (1 212) 326 7410  
Fax no.:  
E-mail: omansoor@unicef.org

Ms Ketsamay Rajphangthong  
Project Officer Area Based  
P.O. Box 926, Port Vila, Vanuatu  
Tel. No.: (678) 24655  
Fax no.: (678) 27709  
E-mail: ketsamay-unicef@vanuatu.com.vu

Ms Gillian Mellsop  
Representative  
UNICEF Pacific, Private Mail Bag  
Suva, Fiji  
Tel. no. (679) 330 0439  
Fax no. (679) 330 1667  
E-mail: gmellsop@unicef.org

Dr Kamrul Islam  
Project Officer, Health/ECD  
UNICEF Pacific, Private Mail Bag  
Suva, Fiji  
Tel. no. (679) 330 0439  
Fax no. (679) 330 1667  
E-mail: kislam@unicef.org

Dr Robyn McIntyre  
Project Officer, EPI  
UNICEF Pacific, Private Mail Bag  
Suva, Fiji  
Tel. no. (679) 330 0439  
Fax no. (679) 330 1667  
E-mail: rmcintyre@unicef.org
Dr Kouichi Morita  
Chief Advisor  
JPIPS Project Office  
Fiji Pharmaceutical Services Centre  
GPO Box 106, Suva, Fiji  
Tel. no.: (679) 338 8010 / 338 8069  
Fax no.: (679) 338 8068  
E-mail: jpips@connect.com.fj

Dr Yasuhiko Kamiya  
Deputy Chief Advisor/Epidemiologist  
JPIPS Project Office  
Fiji Pharmaceutical Services Centre  
GPO Box 106, Suva, Fiji  
Tel. no.: (679) 338 8010 / 338 8069  
Fax no.: (679) 338 8068  
E-mail: jpips@connect.com.fj

Mr Hiroshi Osawa  
Project Coordinator  
JPIPS Project Office  
Fiji Pharmaceutical Services Centre  
GPO Box 106, Suva, Fiji  
Tel. no.: (679) 338 8010 / 338 8069  
Fax no.: (679) 338 8068  
E-mail: jpips@connect.com.fj

Mr Tatsuhiko Tsukakoshi  
Vaccine Logistics Management  
JPIPS Project Office  
Fiji Pharmaceutical Services Centre  
GPO Box 106, Suva, Fiji  
Tel. no.: (679) 338 8010 / 338 8069  
Fax no.: (679) 338 8068  
E-mail: jpips@connect.com.fj

Mr Kenzo Sasagawa  
Cold Chain Maintenance  
JPIPS Project Office  
Fiji Pharmaceutical Services Centre  
GPO Box 106, Suva, Fiji  
Tel. no.: (679) 338 8010 / 338 8069  
Fax no.: (679) 338 8068  
E-mail: jpips@connect.com.fj

Ms Seini Ravea  
National EPI Coordinator  
Ministry of Health Fiji  
c/o JPIPS Project Office  
Fiji Pharmaceutical Services Centre  
GPO Box 106, Suva, Fiji  
Tel. no.: (679) 338 8010 / 338 8069
NEW ZEALAND INTERNATIONAL AID AND DEVELOPMENT AGENCY

Fax no.: (679) 338 8068
E-mail: jpipes@connect.com.fj

Ms Temalesi Vakaotia
Project Assistant
JPIPS Project Office
Fiji Pharmaceutical Services Centre
GPO Box 106, Suva, Fiji
Tel. no.: (679) 338 8010 / 338 8069
Fax no.: (679) 338 8068
E-mail: jpipes@connect.com.fj

Mr Sachida Nand
Programme Administrator (Regional)
New Zealand International Aid and Development Agency
New Zealand High Commission
P.O. Box 1378, Suva, Fiji
Tel. no.: (679) 331 1422
Fax no.: (679) 330 0842
E-mail: Sachida.Nand@mfat.govt.nz

SECRETARIAT OF THE PACIFIC COMMUNITY

Dr Narendra Singh
Communicable Diseases Surveillance Specialist/Epidemiologist
Public Health Surveillance and Communicable Disease Control Section
Public Health Programme
Secretariat of the Pacific Community
Nabua, Suva
Fiji Islands
Tel. no.: (679) 337 0733
Fax no.: (679) 337 0021
E-mail: narendras@spc.int
Ms Carrie-Anne Best welcomed all PIPS partners and officially opened the meeting at 1600.

1. Outstanding issues from key EPI needs identified in 2005

Fiji
- Effective Vaccine Store Management assessment of 3 divisional stores still needs to be established (JICA)

French Polynesia
- Immunity assessment - WHO received no formal request for assistance

Guam
- Coverage survey scheduled for 2007 (CDC)

Kiribati
- Cold chain replacement- 14 solar refrigerators procured for SIA last year by UNICEF and JICA, continued assistance with cold chain refurbishment needed (JICA)
- EPI data quality and birth dose Hep B monitoring not conducted as the SIA was considered the priority (WHO)

FSM
- In country training for EPI coordinators rescheduled for July 2006 (JICA)
- Incinerator and transport procurement not completed (JICA)

Nauru
- UNICEF received no request for training of EPI Managers
- Measles immunity assessment- WHO in communication via e-mail regularly and assistance offered
- Hep B birth dose strategy- planning conducted via e-mail (WHO)
- Review of rubella immunization status- planning in progress (WHO)
Annex 3

NEC
- Sero survey agenda being internally discussed amongst French territories (WHO)
- Communication Strategy for EPI- (UNICEF) no request received

Samoa
- Coverage survey for MR/QA (WHO)
- Hib vaccine introduction -WHO advise country is not ready for new vaccine introduction

Solomon Islands
- Boat - unclear whether this has been supplied (JICA)
- Incinerator not procured (JICA)
- Data Management and recording improvements (WHO)
- Staff training (UNICEF and JICA – safe injection)

Tonga
- Communication Strategy –(UNICEF) no request received
- Staff training (UNICEF) and cold chain (JICA/WHO/UNICEF) training rescheduled for Aug 2006

Tuvalu
- Communication Strategy- (UNICEF) no request received

Vanuatu
- Transport not procured (JICA)
- Further training needed for improving routine coverage (UNICEF/WHO)

Wallis and Futuna
- TA Sero survey- (WHO), work in progress

2. Priority needs for 2006/2007

General EPI Programmes: The US and French territories have generally strong routine EPI programmes. Countries still requiring significant assistance and support are Kiribati, Solomon Islands, Vanuatu, Nauru, and Samoa.

The need to support Samoa was highlighted as a priority. Samoa is quickly accumulating susceptible populations due to low coverage rates.

Overall there is still a need to strengthen routine services in PIC, particularly in the introduction of birth dose Hep B and development of Hep B control guidelines.

SIAs: Immediate priorities for EPI are to support SIAs in Solomon Islands and Vanuatu with joint planning from CDC/UNICEF/WHO/JICA.

The government of Vanuatu initially committed significant funding for the SIA but this has since been reduced, UNICEF through AusAID funding may be able to commit further funding to this campaign. UNICEF expressed how grateful they are to their major funders AusAID/NZAID.

-Vanuatu: AusAID is happy to support the SIA in Vanuatu as the recent measles outbreaks highlights the need for donors to be proactive not reactive. Support from AusAID will be directed through UNICEF. NZAID suggested that the government of Vanuatu should liaise with the High Commission in Port Vila to explore opportunities for further funding. JICA is happy to continue assistance to Vanuatu through the existing framework.
UNICEF highlighted that the provision of funding is not the only issue to achieve high coverage during SIAs. Lack of commitment to SIAs at government level can also be an issue. WHO worked to raise awareness of the falling EPI coverage and the importance of the measles SIA with high level government officials during a recent visit.

-Solomon Islands: will need more assistance with surveillance once the SIA is completed. An opportunity exists to improve routine EPI and surveillance with Health Sector Reform Project. This is one of the remaining countries yet to introduce the rubella vaccine.

New vaccines: The costs of new vaccine introduction were raised and it was noted that whilst costs can initially be extremely high these decrease after introduction. Rubella and HIB vaccines are the priority. The question was raised whether funding will be available for new vaccine introduction. AusAID identified the need to lobby at higher political levels for this support.

UNICEF priority areas for the coming 12 months are the VII for routine EPI and all vaccine procurement. UNICEF will also focus on the development and implementation of communication strategies.

Rotary priorities are to assist Tonga in the introduction of the HIB vaccine in conjunction with the government of Japan and with the procurement of an incinerator for Tuvalu.

JICA will continue with training for a further 6 countries, and annual regional training on cold chain/vaccine safety/logistics. JICA will also provide technical assistance for developing a draft training manual for PIC. JICA highlighted their commitment to EPI in the Pacific and that they will liaise with the Government of Japan to determine whether more equipment is required.

CDC will continue with coverage surveys for their 6 priority jurisdictions and with the development of registries with the aim of being able to rely on each registry for coverage data. They will communicate more closely with JICA to harmonize support.

WHO identified surveillance as a major area of support needed by countries. Strengthening surveillance is important for all infectious diseases.

VIDRL will continue to provide support to laboratories and will add surveillance information. The introduction of techniques using dried blood spots will make serological surveillance easier to implement. They are willing to test samples of outbreaks of up to 10-20 samples, but larger numbers will require addition funding.

It was noted that a sero-survey for rubella in Vanuatu requires funding.

SPC requested that a measles programme template for the region be developed which countries can use for their own purposes. WHO stated that this was almost completed.

3. Comment on the PIPS Secretariat and the way forward

It was felt that the PIPS partnership is functioning effectively and fulfilling an important function but it is important that coordination within PIPS be maintained. The PIPS secretariat will continue monthly meetings.

It was noted that Fiji was offered much assistance primarily due to location of development agencies.

Kiribati and Solomon Islands have now become GAVI eligible. UNICEF/WHO will have bilateral meetings with countries to assist in proceeding with the GAVI application if they so wish.