Meeting Report

Workshop on Lessons Learnt from Pandemic Influenza A(H1N1) Vaccine Deployment and Vaccination

Nadi, Fiji
25–27 August 2011

World Health Organization
Western Pacific Region
SEVENTH PACIFIC IMMUNIZATION PROGRAMME STRENGTHENING WORKSHOP
AND WORKSHOP ON LESSONS LEARNT FROM PANDEMIC INFLUENZA A(H1N1) VACCINE DEPLOYMENT AND VACCINATION
REPORT

WORKSHOP ON LESSONS LEARNT FROM PANDEMIC INFLUENZA A (H1N1)
VACCINE DEPLOYMENT AND VACCINATION

Nadi, Fiji
25-27 August 2011

Convened by:
WORLD HEALTH ORGANIZATION
REGIONAL OFFICE FOR THE WESTERN PACIFIC

Not for sale

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

15 November 2011
NOTE

The views expressed in this report are those of the participants in the workshop on lessons learnt from pandemic influenza A (H1N1) vaccine deployment and vaccination and do not necessarily reflect the policies of the World Health Organization.

This report has been prepared by the World Health Organization Regional Office for the Western Pacific for the participants of the workshop on lessons learnt from pandemic influenza A (H1N1) vaccine deployment and vaccination which was held in Nadi, Fiji from 25 to 27 August 2011.
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tr>
<td>EVM</td>
<td>Effective Vaccine Management</td>
</tr>
<tr>
<td>NDVP</td>
<td>National Deployment and Vaccination Plan</td>
</tr>
<tr>
<td>TAG</td>
<td>Technical Advisory Group</td>
</tr>
<tr>
<td>AEFI</td>
<td>Adverse Events Following Immunization</td>
</tr>
<tr>
<td>GBS</td>
<td>Guillain-Barre Syndrome</td>
</tr>
<tr>
<td>NRA</td>
<td>National Regulatory Authority</td>
</tr>
<tr>
<td>USFDA</td>
<td>United States of America Food and Drug Administration</td>
</tr>
<tr>
<td>TGA</td>
<td>Therapeutic Goods Administration</td>
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<tr>
<td>HCW</td>
<td>Health Care Workers</td>
</tr>
<tr>
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<td>Expanded Programme on Immunization</td>
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<td>Joint Reporting Form</td>
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<td>TVL</td>
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<td>JICA</td>
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<tr>
<td>NZAID</td>
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<td>PIPS</td>
<td>Pacific Immunization Programme Strengthening</td>
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<td>UNICEF</td>
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<td>VDPV</td>
<td>Vaccine Derived Poliovirus</td>
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<td>WHO</td>
<td>World Health Organization</td>
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<tr>
<td>MIS</td>
<td>Management Information System</td>
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<tr>
<td>IMS</td>
<td>Infection Management System</td>
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SUMMARY

The Workshop on Lessons Learnt from Pandemic Influenza A (H1N1) 2009 Vaccine Deployment and Vaccination was held from 25 to 27 August 2011 in Nadi, Fiji.

The objectives of the workshop were:

(1) to identify challenges, successes and lessons learnt in the implementation of pandemic influenza A (H1N1) 2009 vaccine deployment and vaccination; and

(2) to update the national deployment and vaccination plans (NDVPs) for pandemic influenza A (H1N1) 2009 vaccine for further integration into existing national pandemic preparedness and response plans and to formulate action plans to address implementation gaps.

The workshop was organized into seven plenary sessions that covered specific topics, or “core areas”, that were used by almost all countries for planning and implementing the activities to deploy and vaccinate using the A (H1N1) 2009 pandemic influenza vaccine in order to mitigate the impact of the influenza pandemic. After each plenary, countries met in one of the four working groups that were organized. A checklist, prepared by the Secretariat, was used by each country to identify their lessons learnt and possible gaps in order to determine what core areas of their NDVP (their NDVP A (H1N1) used during the period 2009-2010) requires updating for use in a future influenza pandemic. This report will present a consolidated list of lessons learnt.

A major lesson learnt was that almost all countries did not have timely access to the A (H1N1) 2009 influenza pandemic vaccine. When they did, the quantities were limited and the delivery of all of the required doses was not timely. Public information regarding the safety and the efficacy of the pandemic influenza vaccine was influenced by information obtained from the Internet, which provided factual information as well as unfounded rumours in other countries.

The rapidity to which this information circulated both globally and within the Region affected the perception of the public. Hence, the demand for seeking vaccination was less, especially given the mild nature of the pandemic virus and its impact on the health of individuals. The participants emphasized that better planning for the next pandemic will be required in the following areas:

(1) public information operations;

(2) training human resources;

(3) more supervisors that are well trained;

(4) planning surge capacity for vaccination operations, storage and transportation of vaccines and ancillary items that will be required;

(5) updating each country’s management information system will be a necessity;

\footnote{Vaccination Strategies, Managing Deployment, Legal and Regulatory, Public Communication Information and Communication, Human Resources, Supply Chain Logistics, Waste Management, AEFI Surveillance.}
establishing collaborative partnerships with all sectors of society will be critical, including the establishment of planning committees at all levels; and

securing the approval for the NDVP and the budget from the highest political offices in each country will be critical.

The participants endorsed a recommendation to seek the approval of their plan and supporting budget from the highest political offices in their country by the end of June 2012.

The following Member States and areas from the Pacific island countries participated in the Workshop on Lessons Learnt from Pandemic Influenza A (H1N1) 2009 Vaccine Deployment and Vaccination organized by the Western Pacific Regional Office: American Samoa, Cook Islands, Fiji, French Polynesia, Guam, Kiribati, the Commonwealth of the Northern Mariana Islands, the Marshall Islands, the Federated States of Micronesia, New Caledonia, Niue, Palau, Samoa, Solomon Islands, Tokelau, Tonga, Tuvalu and Vanuatu. The workshop was held from 25 to 27 August 2011 in Nadi, Fiji.

Representatives from the United Nation's Children's Fund (UNICEF) and the Western Pacific Regional Office Technical Advisory Group (TAG) Chairmen Dr Robert Hall and consultants Dr Lisi Tikoduadua and Dr Ruff Tilman were invited participants. Also participating were invited observers from the Embassy of Japan, the Fiji Health Sector Support Program, the Fiji School of Medicine, the Japan International Cooperation Agency and the United States of America Centers for Disease Control and Prevention. Facilitators for the workshop were from the Western Pacific Regional Office, WHO offices Fiji and its officers from the Country Liaison Office in Vanuatu and WHO Headquarters in Geneva.
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1. INTRODUCTION

A workshop on Lessons Learnt from the Pandemic Influenza A (H1N1) 2009 Vaccine Deployment and Vaccination and training on vaccine forecasting and procurement for all vaccines was held from 25 to 27, August 2011 in Nadi, Fiji, for the countries and areas of Pacific island countries.

1.1 Objectives

(1) To identify challenges, successes and lessons learnt in the implementation of pandemic influenza A (H1N1) 2009 vaccine deployment and vaccination.

(2) To update the national deployment and vaccination plans (NDVPs) for pandemic influenza A (H1N1) 2009 vaccine for further integration into existing national pandemic preparedness and response plans and to formulate action plans to address implementation gaps.

1.2 Opening Remarks

Dr Dong-il Ahn, WR, SP/DPS, provided opening remarks for Dr Shin Young-soo, Regional Director of the Western Pacific Region, at the seventh Pacific Immunization Programme Strengthening Workshop and the Workshop on Lessons Learnt from Pandemic A (H1N1) 2009 Vaccine Deployment and Vaccination, held in Nadi, Fiji, between 22 and 27 August 2011. Dr Dong-il Ahn stated: “Influenza A (H1N1) virus emerged in the spring of 2009 and quickly spread around the world, affecting primarily children, young adults and those with underlying medical conditions. On 11 June 2009, WHO raised its pandemic alert to its highest level and worked closely with its Member States and partners. WHO supported all efforts to strengthen preparedness and response activities.

“In the Western Pacific Region, WHO identified 17 countries eligible to receive donated vaccine through WHO. Sixteen of 17 eligible countries received donated vaccine. A total of 294 million doses of pandemic influenza A (H1N1) 2009 vaccine were distributed in all countries of the Western Pacific Region, among which 8.7 million doses were million doses were under WHO donation initiatives.

“The main purpose of this workshop is to learn the lessons from the pandemic influenza A (H1N1) 2009 vaccine deployment and vaccination and assist Member States in updating their pandemic vaccine deployment plans and vaccination. WHO greatly appreciates the relentless efforts of all Pacific Immunization Programme Strengthening partners in providing financial, technical and logistical support to the Pacific island countries and also in supporting this workshop. These include the United Nations Children’s Fund, the Australian Agency for International Development, the Government of Japan and the Japan International Cooperation Agency, the New Zealand Agency for International Development, Rotary International District 2650 Fukui Phoenix Club, the Secretariat of the Pacific Community and the United States of America Centers for Disease Control and Prevention.
"Finally, I would like to thank the Government of Fiji for hosting this workshop, and a very special thanks to all of you for your valuable participation and for building and strengthening our partnership. On behalf of WHO, we wish you all a successful, productive and enjoyable meeting, and a very pleasant stay in Nadi."

2. PROCEEDINGS

2.1 Review of performance and results of country experiences in deploying and vaccinating with A (H1N1) pandemic influenza vaccine

Dr Md. Shafiqul Hossain summarized the efforts undertaken by the Member States in the Region. The 17 eligible countries that received the WHO-donated pandemic vaccine complied with requirements outlined by WHO to qualify for a donation of the vaccine. Between 22 September 2009 and 13 February 2010, these countries signed letters of agreement and prepared their NDVPs. Between seven January 2010 and 23 June 2010, all countries accepting WHO donations received all shipments. A total of 8.7 million doses were distributed to 16 countries. One country could not receive the donated vaccine because of its national regulatory authority’s requirements that involved discussion with the vaccine manufacturer regarding clinical trials.

Figure 1 shows the countries and territories receiving donations vaccine from WHO.

In his presentation, Dr Hossain shared the vaccine utilization rates for the 16 countries that received donated A (H1N1) 2009 pandemic influenza vaccine from WHO and the coverage by the priority groups. The data showed that coverage in pregnant women had the biggest oscillation, ranging from a low of 26% to above 100%.

About 285 million doses of the A (H1N1) 2009 pandemic influenza vaccine were distributed by Australia, Brunei, China, Hong Kong (China), Japan, Macao (China), Malaysia, New Zealand and Singapore.
Dr Hossain summarized the important lessons learnt from the 2009 influenza pandemic as follows:

(1) International collaboration is a critical component of responding effectively to an influenza pandemic, given globalization.

(2) Firm political commitment is required to support good implementation of the plans.

(3) Building consensus within government and with partners in a country will lead to a more successful deployment of the vaccine and vaccination of the target population.

(4) Each country should have a national task force or similar body for supporting effective planning and coordination of the plan.

(5) Using the installed capacity of a country’s national immunization plan provided a platform for planning the delivery of the pandemic vaccine and vaccination.

(6) Those countries with experience in executing mass vaccination campaigns were able to use this experience for rapidly implementing their activities.

(7) Ensuring better management of logistics and vaccine management are critical in an influenza pandemic.

(8) Planning of surge capacity for different activities, from cold chain storage capacity to transport to having sufficient vaccinators, is required.

(9) The involvement of the local government proved to be the most important element in mobilizing the community.

(10) In an influenza pandemic, governments should provide timely and clear information regarding all aspects of the pandemic.

(11) For resource-poor countries, mobilization involving government and both internal and external partners is vital for obtaining required resources.

(12) Having sufficient vaccine available very early is critical to obtaining good coverage and saving lives.

A total of 22,481 cases of adverse events following immunization (AEFI) were reported to WHO. Of these, 915 cases were considered serious (rate of 0.7/100,000) and 128 were diagnosed with Gullain-Barre Syndrome (GBS) (rate of 0.1/100,000).

2.2 Summary of plenary sessions

The workshop was organized into seven plenary sessions that covered specific topics, or "core areas", that were used by almost all countries for planning and implementing the activities

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to deploy and vaccinate using the A (H1N1) 2009 pandemic influenza vaccine in order to mitigate the impact of the influenza pandemic.

Each plenary session commenced with countries presenting on the selected topic(s). Questions and answers followed. After each plenary, countries met in their assigned working groups; three working groups were organized. A checklist, prepared by the Secretariat, was used by each country to identify their lessons learnt and possible gaps in order to determine what core areas of their NDVP (their NDVP A (H1N1) used during the period 2009-2010) required updating for use in a future influenza pandemic.

Each working group wrote a consolidated list of successes, lessons learnt and gaps that was presented in the plenary session after work group discussions and before moving on to the next set of topics. This report will present a consolidated list of lessons learnt that resulted from the presentations prepared by each working group in each core area of pandemic influenza A (H1N1) 2009 vaccine deployment and vaccination.

The final plenary session and working group was dedicated to individual country work for preparing a list of activities that require updating in each country’s NDVP.

2.2.1 Plenary on Legal and Regulatory Areas

Dr Sato Yoshikuni, Western Pacific Region, summarized the lessons learnt regarding the Region’s status for assuring that vaccines of quality are used in immunization programmes. The data and information available showed that, except for those territories affiliated with the United States of America or France, none of the other Pacific island countries and areas has a functioning national regulatory authority (NRA) that can regulate the quality of vaccines used in those countries. Some countries and areas have pharmacy boards that regulate the use of drugs, but they cannot carry out the basic regulatory functions required by WHO for importing vaccines. Of the 20 Pacific island countries and areas, 13 use the services of the United Nations for procuring vaccines.

Many countries in the Region did not have in place a full functioning NRA as per the WHO definition and criteria. Lack of information, the use of a novel adjuvant, the presentation of the pandemic influenza vaccine and the dosing schedule caused delays in some countries who received their donated vaccine.

Many of the major countries in the Region have the legal authority and processes for registration of medicines and vaccines. China, Japan, the Philippines and the Republic of Korea account for 94% of the Region’s population. All have NRAs that regulate the use of vaccines. Only Cambodia, Fiji, New Caledonia and New Zealand indicated that their countries had barriers to the use of the 2009 pandemic influenza vaccine. Authorities in Fiji stated that this vaccine needed to be registered in one country that prequalified the vaccine. The remaining countries in the Region made arrangements for permitting the vaccine to be used or imported.

WHO facilitated the sharing of information on regulatory evaluations and the exchange of information with regulatory agencies in preparation for the use of the 2009 pandemic influenza vaccines. Many NRAs fast-tracked the registration of the 2009 pandemic vaccines based on available data provided by producers and licensing status in the country of production and the decisions made by regulatory bodies such as the EMA, the United States of America Food and Drug Administration (USFDA), Health Canada and the Therapeutic Goods Administration (TGA) of Australia.
The experience with the importation and/or licensing of the 2009 pandemic influenza vaccine in the Region indicated that post-marketing and/or AEFI systems need to be strengthened and harmonization of regulatory pathways in all countries will be essential for allowing collaboration among NRAs.

2.2.2 Plenary on Injection Safety and Waste Management and Adverse Events

Vanuatu

Vanuatu received 25,000 doses of the 2009 pandemic influenza vaccine and 100% of the targeted population was vaccinated. Health care workers (HCW), pregnant women, people with underlying medical conditions (people of all ages with chronic disease, in particular asthma and diabetes) and young adults 17-19 years old were offered the vaccine. Vaccination of the target population began on 1 March 2010 and was completed by the end of the month. Follow-up and monitoring of the population vaccinated for detection of AEFI continued until the end of April 2010.

Only Auto-Disable syringes were used and safety boxes were distributed for the collection of used syringes. The Government used the system in place for collecting and incinerating used injection equipment. Used injection equipment was burned at the peripheral levels. Staff received refresher updates about not recapping the needle after the administration of vaccine and safe disposal of used injection equipment.

The AEFI cases reported to the Ministry of Health were all related to pain at the injection site in people vaccinated with pandemic influenza vaccine, of which none required medical attention.

Leonard Tabilip, national Expanded Programme on Immunization (EPI) Coordinator, Vanuatu, summarized the lessons learnt for his country as follows:

(1) Excellent commitment provided from all levels in support of the A (H1N1) 2009 influenza vaccination campaign was critical.

(2) Working with the media was essential to mobilize the community and target groups.

(3) Providing training to HCW and motivating them resulted in excellent performance and motivation.

(4) WHO played a critical role in providing information, technical leadership, guidelines and assistance in obtaining vaccine and ancillary supplies.

Immunization safety lessons learnt – Western Pacific Regional Office

Dr Md. Shafiqul Hossain reported that, for 2010, five Pacific island countries and areas indicated that they did not have a functioning AEFI system in place. Further, three Pacific island countries did not respond to this question when they submitted their answers using the WHO/UNICEF Joint Reporting Form (JRF). Table 1 below summarizes the status on immunization safety indicators collected using the JRF from the Pacific island countries.
Table 1: Reported data on indicators regarding vaccine and injection safety in the Pacific island countries for 2010 using JRF

<table>
<thead>
<tr>
<th>Programme Area</th>
<th>Yes</th>
<th>No</th>
<th>Not reported</th>
<th>(%) Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>AEFI surveillance in place</td>
<td>12</td>
<td>5</td>
<td>4</td>
<td>(57)</td>
</tr>
<tr>
<td>AEFI Causality Committee in place</td>
<td>10</td>
<td>8</td>
<td>3</td>
<td>(48)</td>
</tr>
<tr>
<td>Policy on injection safety Developed</td>
<td>14</td>
<td>3</td>
<td>4</td>
<td>(66)</td>
</tr>
<tr>
<td>Use of AD syringes in place</td>
<td>14</td>
<td>3</td>
<td>4</td>
<td>(66)</td>
</tr>
<tr>
<td>Policy on waste management in place</td>
<td>14</td>
<td>2</td>
<td>5</td>
<td>(66)</td>
</tr>
</tbody>
</table>

Based on the data for the Pacific island countries, there is a need to improve activities and policies to assure that those countries and areas follow the best practices for assuring immunization safety. Dr Hossain indicated that for the future, the Western Pacific Regional Office will work towards building up the capacity of the countries and the areas in the Region to improve their abilities in immunization safety.

2.2.3 Plenary Supply Chain Management and Lessons Learnt for Routine Immunization System Strengthening

Samoa

The Ministry of Health determined the following objectives for its A (H1N1) 2009 influenza vaccination campaign:

1. protect at least 10% of the population who are at high risk of contracting (H1N1) in case a second wave breaks out;
2. be better prepared for a second wave of an (H1N1) outbreak in order to prevent health care services from being interrupted; and
3. reduce morbidity and mortality in case a second wave of an outbreak hits Samoa.

WHO donated 28,000 doses of the pandemic influenza vaccine to Samoa, including ancillary supplies of syringes and safety boxes, that allowed the Government to offer more vaccine to the public. Table 2 shows the results of their pandemic influenza vaccination campaign.
Table 2: Number of people targeted for vaccination by target group using the 2009 pandemic influenza vaccine (2010), Samoa.

<table>
<thead>
<tr>
<th>Target group</th>
<th>Estimated Population</th>
<th>Number of Persons vaccinated</th>
<th>(% of target population vaccinated)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HCW</td>
<td>1001</td>
<td>980</td>
<td>98%</td>
</tr>
<tr>
<td>Pregnant women</td>
<td>3770</td>
<td>3146</td>
<td>85%</td>
</tr>
<tr>
<td>Persons w/chronic diseases 6 mo.-5 years</td>
<td>7400</td>
<td>3778</td>
<td>78%</td>
</tr>
<tr>
<td>Critical service workers</td>
<td>3700</td>
<td>2899</td>
<td>91%</td>
</tr>
<tr>
<td>Other people</td>
<td>10 000</td>
<td>12 300</td>
<td>123%</td>
</tr>
<tr>
<td>Total</td>
<td>28 000</td>
<td>26 103</td>
<td>93%</td>
</tr>
</tbody>
</table>

(a) Total population Samoa, 2 184 992

The challenges confronted in deploying the vaccine were communications breakdowns with the other islands during the second shipment of the vaccine and ancillary items and human resources.

The lessons learnt from the deployment of the vaccine were:

1. the inventory management system needed to be updated at all levels;
2. distribution sites should alert the consignees of their shipment details so that they are ready to receive their supplies. To this end, the Government will need ensure that supply chain managers understand the importance of preshipment alerts;
3. regular updates of the cold chain equipment are highly necessary for effective vaccine management; and
4. managers should improve the coordination team.

The estimated budget for the campaign was US$ 54 122 and US$ 43 197 was spent on the campaign. A total of 26 103 people were vaccinated, costing US$ 1.64 per vaccinated person.

2.2.4 Plenary on Management of Vaccine Deployment

Tonga

The Government of Tonga had as its objective to save lives and protect the health of its citizens against the influenza virus that caused 2009 influenza pandemic.

A Deployment Task Force was appointed by the Ministry of Health to oversee the execution of the deployment and vaccination operations as per its Implementation Plan. The task force was headed by the Chief Nursing Officer/Immunization Services Coordinator. The A (H1N1) 2009 influenza vaccination campaign was carried out in two phases. Tonga was given sufficient vaccine to offer all of its citizens (estimated at 104 000) a dose of the pandemic vaccine.

The first phase called for vaccination of the HCW, emergency and border personnel and followed by pregnant women, mothers who care or live with children under six months old, government personnel, security forces and workers in other leading agencies, people with
diabetes and chronic diseases (respiratory, renal, cardiac, liver and neurological conditions) and youth between 10 and 19 years old.

The second phase called for vaccinating the remaining population. The government set a goal of vaccinating at least 90% of this population. Data regarding the number of doses administered confirmed that 100% of the Tonga population was vaccinated.

Tonga confirmed its first cases of pandemic influenza due to the A (H1N1) influenza virus in July 2009. Eventually, 20 cases were confirmed, with one death reported -- a health care worker.

An awareness campaign was launched on 15 March 2010. The pandemic vaccine arrived on 24 March, with vaccination commencing on 8 April. Princess Salote Pilolevu Tuita launched the campaign. The other islands received their vaccine starting on 14 April. Deployment for Phase I was completed by 24 May. The second shipment of donated vaccine arrived on 18 May. But additional syringes did not arrive until early June 2010. Deployment for the second phase was complete on 28 February 2011.

Chief Nursing Officer Sela Sausini Passi stated that adequate financial and human resources and good preparation supported by a strong commitment from the minister of health allowed her office to execute its plan. She stated further that sound planning enabled her office to put into place the required logistics and social mobilization campaign. She emphasized that her staff were highly committed to execute the plan.

The major challenges faced by the campaign were the negative media from abroad, providing the vaccine to daytime workers, poor weather and insufficient funds for allowing staff time to enter the data into the Hospital Information System.

Passi stated the following essential elements or conditions were some of the lessons learnt from the implementation of their plan:

(1) good planning is vital for executing the plan;
(2) good leadership is necessary;
(3) financial resources are crucial for success;
(4) an effective community strategy is critical for reaching the community and HCW; and
(5) having a good and motivated team.

The total cost of the campaign was US$ 44,796. The costs were distributed as follows:

(1) implementation of vaccination strategies, US$ 21,699 (48.4%);
(2) management and organization, US$ 5490 (12.3%);
(3) communication and information, US$ 6851 (15.3%);
(4) human resources and security, US$ 4167 (9.3%);
(5) public information, US$ 2441 (5.4%);
(6) supply chain processes, US$ 1660 (3.7 %); and
(7) collection of medical waste, US$ 3003 (6.7 %).

Passi said 80 HCW were dedicated towards the effort.

2.2.5 Plenary on Vaccination Strategies and Implementation

*Kiribati*

The deployment and vaccination operations were under the responsibility of the offices of Medical Services. The Government established a task force group consisting of 16 members that was chaired by the secretary to the Cabinet. A working group of five members was charged with drafting the deployment and vaccination plan.

The NDVP plan was completed on 5 December 2009. The donation of 10 000 doses from WHO arrived on 26 December 2009. The distribution of vaccine to clinics was completed by 9 January 2010. Training of staff was completed between 9 and 23 January 2010. The public information campaign was carried out between 24 January and 13 February 2010. The vaccination campaign was conducted from 23 January and completed by 13 February 2010. The termination report was completed by 27 February 2011.

WHO donated 10 000 doses of the 2009 pandemic influenza vaccine, of which 7756 doses were administered. Tikuaa Tekitange, EPI Coordinator, stated that 99% of all HCW were vaccinated (644), 112% of pregnant women were vaccinated (1122); 97% of people identified with diabetes received a dose of the pandemic vaccine (1726); 83% of people identified with asthma were vaccinated (3448) and 161% of children aged 6-59 months old were vaccinated with pandemic vaccine (816).

Tekitanga stated that the planned budget was estimated at US$ 15 780. However, the Government provided only 50% of the requested funds. Table 2 shows the breakdown of the budget and allocations.

The challenges confronted by management in implementing its plan were:

1. Ten of 17 refrigerators in the outer islands were either out of order or work not working properly.
2. The communications network with the outer islands was not fully operational.
3. Transportation to the outer islands was problematic.
4. Training for staff on the outer islands was provided via radio; poor quality of reporting.
5. People not targeted for vaccination using the pandemic influenza vaccine demanded that they receive the vaccine.

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4 Working group members were: the Director of Public Health (chair), the CDS coordinator, the EPI coordinator, a pharmacy technician and a senior health promotion officer.
Tekitanga said the following lessons learnt were:

(1) Lack of solid data and a planning figure led to poor budgetary decision-making, leading to a shortage of funds.

(2) Providing training over the radio is not effective when compared with face-to-face training methods.

(3) Reporting the results of the pandemic vaccination was always a problem.

Tekitanga said efforts to improve operations in a future influenza pandemic should ensure that all cold chain equipment is in working order, all high frequency radios should be tested routinely to ensure that they are functional at all times and that a logistics plan supports timely distribution of vaccine and ancillary supplies to the outer islands (i.e. sufficient transportation).

2.2.6 Plenary on Human Resources Management

Fiji

The Government of Fiji targeted the following groups for vaccination: HCW, pregnant women, people with chronic illnesses (determined to be at high risk from outcomes because of an infection with the 2009 pandemic influenza virus, people between the ages of six and 30 years old, those who are immune-compromised and children attending special schools. The table shows the number of doses administered by the target group and coverage obtained.

Table 3: Number of doses administered and coverage by the target group using the 2009 pandemic influenza vaccine (2010), Fiji

<table>
<thead>
<tr>
<th>Target group</th>
<th>Estimated Population</th>
<th>Dose administered</th>
<th>(%) Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>HCW</td>
<td>10 000</td>
<td>6235</td>
<td>62%</td>
</tr>
<tr>
<td>Pregnant women</td>
<td>20 000</td>
<td>13 383</td>
<td>67%</td>
</tr>
<tr>
<td>Persons with Chronic illness and Others</td>
<td>58 200</td>
<td>61 138</td>
<td>105%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>88 200</strong></td>
<td><strong>80 756</strong></td>
<td><strong>92%</strong></td>
</tr>
</tbody>
</table>

WHO donated 88 000 doses of the pandemic influenza vaccine and the required syringes and safety boxes (ancillary supplies). Fully, 80 756 doses were administered, or 92%. The estimated cost for carrying out the pandemic influenza campaign was US$ 149 790.

The Government deployed the vaccine and ancillary items to 168 ward clinics and nursing stations at 27 destinations. To ensure that sufficient human resources and other support was made available, microplans were formulated at meetings held at divisional levels. Supervisory visits also were planned. The formulation of the Communication Plan also included roles for HCW.

Despite a cyclone and typhoid outbreak, the Ministry of Health was able to successfully redeploy and mobilize staff to support deployment and vaccination operations. The 2009 pandemic influenza campaign was launched 30 April 2010.

The Government believes that its efforts to vaccinate the target groups contributed to blunting the impact of the influenza pandemic.
Despite the successes achieved, the Government faced the following challenges in managing human resources in support of the pandemic influenza campaign: early retirement of senior nurses in 2009; managing the responses to the cyclone (Tomas) and the typhoid fever outbreak demanded redeployment of staff at critical moments during the deployment operations; and providing continuous training on basic EPI operations for staff because of high turnover.

Dr Frances Bingwor of Fiji said that the following lessons were learnt from the response to the 2009 influenza pandemic:

(1) Good planning is key, especially microplanning.

(2) Representation of all stakeholders in the task force is important, especially nursing.

(3) Public communication is critical, both with the public and within the government.

(4) Government support in approving additional transportation and communication resources is critical. And recognition of work is of the essence.

Dr Bingwor said that the MIS/HIS should keep the data base registry of EPI-trained personnel at divisional and subdivisional levels in order to allow efficient and timely management of human resources. In planning for the pandemic, he stated that the government needs to consider:

(1) Strengthening supervision and reporting and providing feedback to HCW and other users of the information collected for deployment and vaccination operations.

(2) Providing workshops for training staff in the EPI and strengthening managers’ skills in formulating microplans.

(3) Specify operational administrative tasks to be made available in supporting human resources for implementing planned activities.

Table 5 shows budget expenditures by planning item in support of the deployment and vaccination operations for responding to the 2009 influenza pandemic.

Table 4. Expenditures by planning item in support of the deployment and vaccination operations for responding to the 2009 influenza pandemic, Fiji.

<table>
<thead>
<tr>
<th>Core Area</th>
<th>Budget Expenditures US$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vaccine strategies</td>
<td>59,714</td>
</tr>
<tr>
<td>Management and Organization</td>
<td>3,409</td>
</tr>
<tr>
<td>Communications and Information</td>
<td>44,018</td>
</tr>
<tr>
<td>Human resource and Security</td>
<td>0</td>
</tr>
<tr>
<td>Public Information</td>
<td>1,610</td>
</tr>
<tr>
<td>Supply Chain and Cold Chain</td>
<td>9,850</td>
</tr>
<tr>
<td>Waste Management</td>
<td>0</td>
</tr>
<tr>
<td>AEFI</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>118,601</td>
</tr>
</tbody>
</table>
Dr Bingwor said that the support provided by Australian Aid and WHO was greatly appreciated and important in supporting the implementation of Fiji’s plan.

2.2.7 Plenary on Advocacy/Social Mobilization and Public Information

Vanuatu

The objectives of the Vanuatu A (H1N1) 2009 pandemic influenza campaign were to protect the HCW force and other front-line workers and protect three groups: pregnant women, all people with chronic diseases and young adults 17 to 19 years old, who were at most risk from the severity of the impact from the pandemic virus should they become infected. Informing the public about measures to take regarding personal hygiene and comportment changes complemented the vaccination campaign.

A total of 25000 people were targeted for vaccination. Table 6 displays the groups and the population for each group.

Table 5: Number of people targeted for vaccination by target group using the 2009 pandemic influenza vaccine (2010), Vanuatu.

<table>
<thead>
<tr>
<th>Target group</th>
<th>Estimated Population</th>
<th>(%) of Target population</th>
</tr>
</thead>
<tbody>
<tr>
<td>HCW and other Frontline workers</td>
<td>1308</td>
<td>0.5%</td>
</tr>
<tr>
<td>Pregnant women</td>
<td>7404</td>
<td>30%</td>
</tr>
<tr>
<td>Persons w/Chronic Diseases</td>
<td>6170</td>
<td>25%</td>
</tr>
<tr>
<td>Young Adults 15-17 years</td>
<td>10118</td>
<td>40%</td>
</tr>
<tr>
<td>Total</td>
<td>25000</td>
<td>100%</td>
</tr>
</tbody>
</table>

(a) Total population Vanuatu, 247648

The donation of the pandemic vaccine arrived in February 2010. Training of staff at national provincial levels took place from 15 to 28 February 2010. The media and public information campaign was held from 15 to 28 February, with the vaccination campaign beginning on 1 March 2010. The vaccination campaign lasted two weeks, but in areas of difficult access, an additional two weeks were required to complete the campaign activities.

The total estimated budget cost for executing the A (H1N1) 2009 pandemic influenza vaccination campaign in Vanuatu was US$ 66,823, of which the government committed US$ 15,290. Table 7 displays the distribution of the budget by core areas.
Table 6: Expenditures by planning item in support of the deployment and vaccination operations for responding to the 2009 influenza pandemic, Vanuatu.

<table>
<thead>
<tr>
<th>Core Area</th>
<th>Budget Expenditures US$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vaccine strategies</td>
<td>14,174</td>
</tr>
<tr>
<td>Management and organization</td>
<td>1,381</td>
</tr>
<tr>
<td>Communications and information</td>
<td>2,615</td>
</tr>
<tr>
<td>Human resources and security</td>
<td>29,869</td>
</tr>
<tr>
<td>Public information</td>
<td>11,932</td>
</tr>
<tr>
<td>Supply chain and cold chain</td>
<td>2,905</td>
</tr>
<tr>
<td>Waste management</td>
<td>255</td>
</tr>
<tr>
<td>AEFI</td>
<td>0</td>
</tr>
<tr>
<td>Evaluation</td>
<td>510</td>
</tr>
<tr>
<td>Miscellaneous expenditures</td>
<td>3,274</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>66,915</strong></td>
</tr>
</tbody>
</table>

The cost per vaccinated person for the A (H1N1) 2009 vaccination campaign was US$ 0.026. This compared favorably with the cost of per child vaccinated against measles of US$ 0.031 in 2009.

The major lesson learnt from the public information and communication efforts were:

(1) The Government had to counteract the negative media campaign against the A (H1N1) 2009 influenza vaccine. Therefore, working closely with the media and preparing them to mobilize communities and target groups is essential.

(2) Good leadership is required from the Ministry of Health in this field.

(3) Excellent commitment is required from all levels of government and partners.

In addition, to the above lessons learnt, Dr Bernard stated that:

(1) A good funding process is required coupled with a strong liaison with potential donors and stakeholders. Dr Bernard, acknowledged the financial support from the Governments of China and New Zealand, Digicel and Telecom Vanuatu Limited (TVL) to close the funding gap.

(2) Having a well-trained and organized cadre of HCW based the routine immunization programme is key to any vaccination effort. Further, Dr Bernard stated that providing feedback on the results of the pandemic influenza campaign was essential to maintain the motivation and dedication of the HCW.

The Ministry of Health-Vanuatu recognized the strong support provide by WHO at all levels.

**Solomon Islands**

Solomon Islands have nine provinces that are made up of 900 islands and atolls with many hard-to-reach areas. HCW are physically challenged in some areas.
The objectives of the campaign were:

1. to ensure the functioning of the health care system;
2. to reduce the mortality and morbidity of those most at risk of serious infection because of the A (H1N1) 2009 pandemic virus; and
3. to reduce the transmission of the pandemic influenza virus in the community.

The A (H1N1) 2009 vaccination campaign targeted HCW, antenatal mothers, front-line essential workers, people with underlying medical conditions and young adults between 15 and 17 years old.

The campaign strategy called for a one-week intensive vaccination effort supported by health promotion and public information messages to ensure that the targeted at-risk population sought its vaccinations at clinics or health care sites.

WHO donated 55,000 doses of the 2009 pandemic influenza vaccine and ancillary supplies. Fully, 41,080 doses were administered (75%). Table 8 displays the vaccination coverage achieved by target group.

Table 7: Number of doses administered and coverage by target group using the 2009 pandemic influenza vaccine (2010), Solomon Islands

<table>
<thead>
<tr>
<th>Target group</th>
<th>Estimated Population</th>
<th>Dose administered</th>
<th>(%) Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>HCW</td>
<td>4,503</td>
<td>2,1625</td>
<td>48%</td>
</tr>
<tr>
<td>Antenatal women</td>
<td>13,777</td>
<td>4,964</td>
<td>37%</td>
</tr>
<tr>
<td>People with chronic illness</td>
<td>9,386</td>
<td>7,204</td>
<td>77%</td>
</tr>
<tr>
<td>Front-line workers</td>
<td>4,503</td>
<td>5,378</td>
<td>119%</td>
</tr>
<tr>
<td>Young adults 15-17 years old</td>
<td>23,231</td>
<td>21,372</td>
<td>92%</td>
</tr>
<tr>
<td>Total</td>
<td>55,000</td>
<td>41,080</td>
<td>75%</td>
</tr>
</tbody>
</table>

Dr Divinal Ogaoga, from the Ministry of Health, stated that training of the HCW support the advocacy and social mobilization campaign. Key activities implemented for informing the public and gaining their support were:

1. The official launch of the campaign, which was integrated with live radio broadcasts in support of World Health Day.
2. Deployment of an information sheet.
3. A letter and information sheets were sent to schools and church leaders, including the offices which provide essential services.
4. Obtaining interagency collaboration.

Some of the challenges faced by the Ministry of Health were delays in receiving the funding; misleading media information about the vaccine; and some health officials were discouraged by the national social mobilization campaign because only certain segments of the population were targeted for vaccination.
The main lessons learnt were:

1. More information about the vaccine was required.
2. The vaccination campaign should have been launched simultaneously in all areas.
3. Misleading media reports should have been addressed immediately coupled with a timely investigation.
4. There should be better involvement of community leaders for informing the community.
5. Communication equipment (radios) should be tested regularly and replaced. During the campaign, managers were impeded in communicating with those areas reporting low coverage for determining what could be done to improve results.
6. The ministry should have made more use of the radio and newspapers for informing and mobilizing the public.

The next version of the Solomon Islands NVDP should include clear strategies and approaches for advocacy and social mobilization activities; the abilities of the task force should be strengthened in this area; the public should be better informed about potential side-effects and where to seek medical attention; and include specific instructions for HCW about how to use surplus vaccine.

The A (H1N1) 2009 pandemic influenza campaign cost US$ 48,656, of which 53% was spent on transport and mobilization of staff and another 43% was spent on training activities. The remaining 4% was spent on logistics for vaccine distribution.

2.3 Final consolidation of lessons learnt from the deployment and vaccination using the A (H1N1) 2009 pandemic influenza vaccine

The following are the most common lessons learnt that were distilled from both working group presentations and discussions. Each country had lessons specific to their context, but these points will not be presented here.

2.3.1 Waste management and injection safety

1. In several countries, the installed capacity to incinerate injection waste will not be sufficient in a severe pandemic. HCW responsible for waste management require a targeted training programme.

2.3.2 AEFI and post-marketing surveillance

1. Protocol for sending AEFI reports to WHO and receiving feedback from WHO was not in place for some countries. Therefore, countries had little information about how to interpret their rates and profile the cases being reported.

2. The offices and committees with responsibility for managing reports of AEFI in an influenza pandemic will require that they are routinely updated about vaccine clinical trials and are invited to mock exercises.
2.3.3 Supply chain management

(1) The Command and Control Protocol should allow for flexible planning and decision-making at operational levels for ensuring that operations are implemented according to local conditions.

(2) Lack of adequate training programmes for all staff and, in particular, for supervisors. The authorities should establish a good training programme in countries that normally do not handle multidose vials of vaccines.

2.3.4 Management of deployment and vaccination operations

(1) Good preplanning will allow for the necessary financial and human resources to be in place for supporting the execution of the NDVP, including operational microplans. These resource estimates need to be reviewed and updated regularly.

(2) Authorities should ensure that other core health services continue to function during an influenza pandemic.

(3) Having a good MIS that will provide reliable information, reports and data will assure that the managers produce a plan that will support the operations and reach the stated objectives. Updating these systems is critical.

(4) It is important to establish the target population to be vaccinated and its sequencing in order that both HCW and stakeholders are informed.

2.3.5 Vaccination strategies and implementation

(1) Service points for the public to access their influenza pandemic vaccine should be tailored according to their needs (clinic hours).

(2) Improving the databases and MIS on the numbers of people with selected chronic diseases that could benefit from receiving the first doses of a pandemic influenza vaccine will greatly facilitate their identification and planning for their vaccination.

2.3.6 Human resources management for deployment and vaccination operations

(1) Only providing training events to supervisors did not assure that front-line HCW were adequately informed and trained.

(2) Training plans fully costed out should be prepared at all levels.

(3) The HCW would have been better prepared if countries had carried out mock exercises in support of a pandemic influenza campaign.

(4) Planning adequate monitoring and supervisory activities will be crucial for assuring good implementation of deployment and vaccination operations.

(5) HCW must be given the required information and data to counteract their fears when using a novel pandemic influenza vaccine.
2.4 Updating the National Deployment and Vaccination Plan

Vanuatu and French Polynesia presented their draft points for updating core areas of their plans.

**Vanuatu**

(1) Legal and regulatory: The Ministry of Health’s EPI unit will propose, with experts, the revision of the Public Health Act to provide the ministry and the Government with the authority to declare the vaccination deployment plan as the overall priority in a pandemic situation.

(2) Public communication: The Ministry of Health’s EPI unit will discuss with Digicel and TVL the establishment of a hot line and identify, select and train staff to be the responders at the hot line in order that the public can access for authoritative information.

(3) Human resources: Prepare a plan for establishing a surge capacity of human resources to support all activities required to allow the rapid implementation of tasks (vaccinators, logisticians, etc.) and that could be mobilized temporarily and deployed in support of the NVDP. The Ministry of Health’s EPI unit will produce an updated list of HCW, both current and retired, (to be revised regularly) that can be mobilized. The plan should include regular training of HCW so that they remain updated.

(4) Information and communication management: Establish a post for a communication officer (CO) within the Ministry of Health to improve the flow of information throughout the health care system and provide timely information about the deployment and vaccination to all stakeholders. The Ministry of Health’s EPI unit will identify and nominate a CO and prepare the necessary budget to mobilize financial resources to provide adequate training of the CO.

(5) Supply chain logistics: The logistics plan should include outsourcing agreements and contracts with both sea and air transport companies to store and ship pandemic influenza vaccine from the national level to peripheral levels.

(6) Managing waste: Increase the current capacity of the Ministry of Health to manage waste disposal, including establishing a clear policy, regulation and plan to collect waste from peripheral levels to provincial levels. The Ministry of Health’s EPI unit will mobilize partners to increase procurement and installation of incinerators in each province.

(7) AEFI surveillance: The Ministry of Health will establish a training programme to improve the operational capacity and performance of the AEFI surveillance system in order to achieve timely reporting and investigation of all AEFI cases to confirm the causality of each case that apparently results from the administration of pandemic influenza vaccine. The Ministry of Health’s EPI unit will formulate a training plan (using existing material) and prepare a training module for staff who will be engaged in surveillance of AEFI. The Ministry of Health’s EPI unit will mobilize additional funding sources for AEFI surveillance and investigation.

**French Polynesia**

(1) NVDP: The Government will develop a NVDP to be included as part of the national Influenza Preparedness Response Plan. The plan will describe the use and deployment of the pandemic influenza vaccine. A budget also will be prepared to allow for implementation of the plan. Partners will be contacted to seek their agreement and to obtain the required additional resources to close the gaps.
(2) Core actions that will require additional emphasis are:

(a) The establishment of a steering committee(s) to oversee and manage the NDVP and the policies for planning the activities to be implemented in the next influenza pandemic.

(b) Formulation of a vaccination strategy with all stakeholders and at all levels to ensure that the objective and activities are agreed upon, including the roles and responsibilities of all at each level.

(c) Formulation of a wastage policy and plan.

(d) Ensuring supply chain logistics so that deployment can be achieved within seven days over 90% of the territory.

(e) Formulation of a human resource plan that will allow better organization of the manpower and to create a surge capacity when necessary and provide for training of staff in all areas.

(f) Communication and information management in order to assure better integration and coordination of resources and activities.

(g) Formulation of a public information plan with a budget.

(h) A review of the current AEFI surveillance capacity and sensitivity will be undertaken to identify gaps and actions to take to ensure that it is functional during an influenza pandemic.

3. CONCLUSIONS

The main conclusions were as follows:

(1) Update the Pandemic Influenza Deployment and Vaccination Plan using their A (H1N1) 2009 NDVP as a platform.

(2) Advise the Western Pacific Regional Office on or before 30 June 2012 about the status of the national Pandemic Influenza Deployment and Vaccination Plan, including when it can be submitted to the appropriate government authority(ies) for approval.
# SEVENTH PACIFIC IMMUNIZATION PROGRAMME STRENGTHENING (PIPS) WORKSHOP AND WORKSHOP ON LESSONS LEARNT FROM PANDEMIC INFLUENZA A (H1N1) VACCINE DEPLOYMENT AND VACCINATION

**22 - 27 August 2011, Nadi, Fiji**

<table>
<thead>
<tr>
<th>Day</th>
<th>Time</th>
<th>Monday, 22 August</th>
<th>Tuesday, 23 August</th>
<th>Wednesday, 24 August</th>
<th>Thursday, 25 August</th>
<th>Friday, 26 August</th>
<th>Saturday, 27 August</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>08:00</strong></td>
<td>REGISTRATION</td>
<td>08:00-10:00</td>
<td>10:00-10:15</td>
<td>08:00-10:00</td>
<td>09:00-10:15</td>
<td>08:00-10:00</td>
<td>08:30-10:15</td>
</tr>
<tr>
<td><strong>11:00</strong></td>
<td>COFFEE BREAK</td>
<td>10:15-10:30</td>
<td>10:30-11:00</td>
<td>10:15-10:30</td>
<td>10:15-10:30</td>
<td>10:15-10:30</td>
<td>10:15-10:30</td>
</tr>
<tr>
<td><strong>12:00</strong></td>
<td>LUNCH BREAK</td>
<td>11:00-12:00</td>
<td>12:00-12:30</td>
<td>12:00-12:30</td>
<td>12:00-12:30</td>
<td>12:00-12:30</td>
<td>12:00-12:30</td>
</tr>
</tbody>
</table>

**Programme:**

- **1. Opening Session**
  - Opening remarks from Ministry of Health/Fiji, WHO, UNICEF
  - Self-introduction
  - Administrative Announcements
  - Workshop objectives (PIPS & H1N1)
  - Group photograph

- **2. Strengthening routine immunization**
  - Maintaining high routine immunization coverage
  - Country plan improvement routine immunization

- **3. Strengthening monitoring and surveillance**
  - Improving EPI data management
  - Country report: web-based immunization registry

- **4. Communication and advocacy**
  - Vaccination week as advocacy tool
  - Linking GHM to EPI interventions

- **5. Vaccine security and management**
  - Update on VII
  - Vaccine inventory tools

- **6. Global and regional overview of pandemic vaccine deployment**
  - Lessons for NRA

- **7. Legal and regulation and policies for pandemic vaccine deployment and vaccine management**
  - Legal and policy recommendations on vaccine deployment and vaccine management

- **8. Overview of lessons learnt from pandemic vaccine deployment and applicability to routine immunization system**
  - Guidelines on updating pandemic vaccine deployment and vaccination plans

- **9. Individual country work on updating pandemic vaccine deployment and vaccination plans**
  - Opening remarks from Ministry/Fiji, WHO
  - Provide recommendations on routine immunization
  - Update on VII
  - Vaccine inventory tools

- **10. Strengthening cold chain systems**
  - Country report

- **11. Strengthening monitoring and surveillance (Cont'd)**
  - Actions to improve vaccine-preventable diseases surveillance
  - Country report: surveillance during Fijian outbreak

- **12. Strengthening cold chain systems**
  - Country report

- **13. Plenary on management of vaccine deployment**
  - Plenary on vaccination strategies and implementation

- **14. Overview of lessons learnt from pandemic vaccine deployment and applicability to routine immunization system**
  - Guidelines on updating pandemic vaccine deployment and vaccination plans

- **15. Overview of lessons learnt from pandemic vaccine deployment and vaccination plans (Cont'd)**
  - Individual country work on updating pandemic vaccine deployment and vaccination plans

**Notes:**

- Sessions are from 08:00 to 16:00 with breaks for lunch and coffee.
- Sessions include opening remarks, discussion on pandemic vaccine deployment, and strategies for routine immunization.
- The programme also includes sessions on communication, advocacy, vaccine security, and policy recommendations.
<table>
<thead>
<tr>
<th>Time</th>
<th>Monday, 20 August</th>
<th>Time</th>
<th>Tuesday, 21 August</th>
<th>Time</th>
<th>Wednesday, 22 August</th>
<th>Time</th>
<th>Thursday, 23 August</th>
<th>Time</th>
<th>Friday, 24 August</th>
<th>Time</th>
<th>Saturday, 25 August</th>
</tr>
</thead>
<tbody>
<tr>
<td>14:45</td>
<td></td>
<td>15:00</td>
<td></td>
<td>13:30</td>
<td></td>
<td>13:30</td>
<td></td>
<td>15:00-</td>
<td>27. Plenary on human resources management</td>
<td>15:00</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>14:45</td>
<td>Break-out session: three groups based on country coverage and future actions</td>
<td>14:45</td>
<td></td>
<td>15:00</td>
<td>28. Plenary on advocacy social plans</td>
<td>15:00</td>
<td></td>
</tr>
<tr>
<td>14:15-</td>
<td>COFFEE BREAK</td>
<td>14:15-</td>
<td>COFFEE BREAK</td>
<td>14:15-</td>
<td>COFFEE BREAK</td>
<td>14:15-</td>
<td>COFFEE BREAK</td>
<td>14:15-</td>
<td>COFFEE BREAK</td>
<td>15:00-</td>
<td></td>
</tr>
<tr>
<td>15:00</td>
<td>8. New vaccine introduction</td>
<td>15:00-</td>
<td>15. Market place</td>
<td>15:00</td>
<td>24. 7th PIPS workshop action presentation and monitoring</td>
<td>15:00</td>
<td>32. Conclusions</td>
<td>15:15-</td>
<td>33. Closing remarks</td>
<td>16:00-</td>
<td></td>
</tr>
<tr>
<td>16:10</td>
<td></td>
<td>16:30</td>
<td></td>
<td>16:10</td>
<td></td>
<td>16:00</td>
<td></td>
<td>16:30</td>
<td></td>
<td>17:00-</td>
<td></td>
</tr>
<tr>
<td>16:30</td>
<td>9. PIPS Partners Coordination Meeting</td>
<td>16:30</td>
<td></td>
<td>16:30</td>
<td></td>
<td>17:00</td>
<td></td>
<td>17:00</td>
<td></td>
<td>18:00</td>
<td></td>
</tr>
</tbody>
</table>

**ANNEX 1**
INFORMATION BULLETIN NO. 2
LIST OF PARTICIPANTS, REPRESENTATIVES/OBSERVERS
AND SECRETARIAT

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