Meeting Report

TENTH PACIFIC IMMUNIZATION PROGRAMME MANAGERS MEETING

30 July–3 August 2018
Nadi, Fiji
Tenth Pacific Immunization Programme Managers Meeting
30 July – 3 August 2018
Nadi, Fiji
MEETING REPORT

TENTH PACIFIC IMMUNIZATION PROGRAMME MANAGERS MEETING

Convened by:

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NOTE

The views expressed in this report are those of the participants of the Tenth Pacific Immunization Programme Managers Meeting and do not necessarily reflect the policies of the World Health Organization or the United Nations Children’s Fund (UNICEF).

This report has been prepared by the World Health Organization Regional Office for the Western Pacific and the UNICEF Pacific Office for the participants in the Tenth Pacific Immunization Programme Managers Meeting, which was held in Nadi, Fiji from 30 July to 3 August 2018.
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Immunization programs / Vaccines / Measles – prevention and control / Hepatitis B – prevention and control / Pacific Islands
SUMMARY

The Tenth Pacific Immunization Programme Managers Meeting was jointly convened by the World Health Organization (WHO) Regional Office for the Western Pacific and the United Nations Children’s Fund (UNICEF) Pacific Office at the Tanoa International Hotel in Nadi, Fiji from 30 July to 3 August 2018.

Participants from 19 Pacific island countries and areas (PICs) attended, as well as eight observers, one temporary adviser, and Secretariat members from WHO and UNICEF.

Presentations provided updates on the implementation of the WHO Global Vaccine Action Plan (GVAP), UNICEF regional updates regarding strengthening of immunization systems and an overview of the Expanded Programme on Immunization (EPI) in the Pacific. Making immunization systems strong would involve ensuring vaccine security, enhancing immunization supply chain systems and improving coverage and equity. Implementation of six out of eight regional immunization goals are on track in the Pacific. Two countries in the WHO Western Pacific Region were assessed as a high risk for poliomyelitis (polio) importation in the Region. Uneven immunization coverage is seen across and within countries in the Region, posing risk of vaccine-preventable disease outbreaks. A new regional strategy and action plan for measles and rubella elimination has been developed to accelerate achievement and promote sustainability of both measles and rubella elimination.

PICs are at high risk from disasters with increased risk of outbreaks of climate-sensitive and water-related diseases with climate change. A total of 169 outbreaks have been reported in the Pacific over the last four years. Many countries in the Pacific experienced vaccine-preventable diseases including mumps, hepatitis A, meningococcal meningitis, pertussis and rotavirus diarrhoea. Improving data quality is a high priority for the PICs. Countries are encouraged to complete the WHO/UNICEF Joint Reporting Form on Immunization in full and submit data on a timely basis. Cold chain management is critical to ensure potency of vaccines, and countries can benefit from the new comprehensive effective vaccine management (cEVM) and continuous improvement planning (cIP) approaches. The Vaccine Independence Initiative (VII) has been assuring vaccine supply security for many PICs since 1995. Countries are benefiting from technical support for forecasting, stock management, supply chain management and temperature monitoring, in addition to ensuring uninterrupted access to prequalified vaccines and immunization supplies. Surveillance for adverse events following immunization (AEFIs) is in place in 24 countries in the Region. There is significant AEFI under-reporting in PICs; improved reporting, timely and comprehensive investigation, and data analysis need to be given high priority, and technical support from partners in this regard should be provided.

Immunization waste contributes to the overall medical waste, and the immunization programme managers should consider the importance of a national health-care waste management programme. National immunization technical advisory groups operate at varying levels of quality in the Region. The Caribbean island mechanism of establishing a subregional technical advisory group may be useful for PICs. Advocacy, social mobilization and behaviour change communications remain key strategies in demand generation and community engagement. Engaging communities as part of risk communication systems is a key to build resilience.
1. INTRODUCTION

1.1 Meeting organization

The Tenth Pacific Immunization Programme Managers Meeting was convened by the World Health Organization (WHO) Regional Office for the Western Pacific and the United Nations Children’s Fund (UNICEF) Pacific Office at the Tanoa International Hotel in Nadi, Fiji from 30 July to 3 August 2018. There were 21 participants from 19 Pacific island countries and areas (PICs), eight observers and one temporary adviser, in addition to Secretariat staff from WHO and UNICEF.

The topics were finalized after discussions with WHO and UNICEF and Pacific Immunization Programme Strengthening (PIPS) partners.

1.2 Meeting objectives

The objectives of the meeting were:

1. to review progress, identify critical issues and determine key actions to achieve the immunization goals specified by the Regional Framework for Implementation of the Global Vaccine Action Plan in the Western Pacific (GVAP) as they pertain to PICs;
2. to identify opportunities for enhancing coordination and collaboration among countries, partners and immunization-related initiatives to support PICs in achieving the immunization goals; and
3. to discuss conclusions and recommendations from the upcoming 27th meeting of the Technical Advisory Group on Immunization and Vaccine-Preventable Diseases in the Western Pacific Region.

2. PROCEEDINGS

2.1 Opening session

The opening session started with devotion by Dr Lisi Tikoduadua.

Dr Yoshihiro Takashima delivered the opening remarks on behalf of Dr Shin Young-soo, WHO Regional Director for the Western Pacific. He highlighted that several countries in the Pacific have experienced disease outbreaks, including meningococcal meningitis and mumps. To avoid similar outbreaks in future, it is vital to be well prepared and sustain high routine immunization coverage. Tools are available to assist in this task.

Mr Sheldon Yett, Representative, UNICEF Pacific, in his remarks noted the achievements of many successes of immunization programmes in the PICs. Despite high national immunization coverage, a significant number of children are missed and do not receive the recommended number of vaccine

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1 Regional immunization goals include: (i) immunization coverage levels; (ii) sustaining polio-free status; (iii) measles elimination including response to measles outbreak; and (iv) introduction of new vaccines.
GVAP strategic objectives cover: (i) effective vaccine management; (ii) vaccine safety; (iii) vaccine-preventable disease (VPD) surveillance; (iv) data management; (v) communications, advocacy and social mobilization; and (vi) subregional Technical Advisory Group (TAG) (equivalent to National Immunization Technical Advisory Group (NITAG)).

2 Immunization-related initiatives include the Vaccine Independence Initiative (VII) and Health Security and Emergencies.
doses. Equity issues, lack of effective communication, social mobilization and inadequate data quality are constraints for achieving and sustaining high immunization coverage.

Dr Torika Tamani gave the remarks on behalf of the host Government and Minister of Health. She stressed that Fiji is committed to attain the highest quality of health. In spite of the limited financial resources, the country is now procuring all vaccines using its own funds. She noted the routine immunization coverage in Fiji has been consistently high and verified by WHO-recommended coverage surveys.

2.2 Updates

2.2.1 WHO update on Global Vaccine Action Plan (GVAP) implementation

Dr Yoshihiro Takashima presented on the GVAP implementation in Western Pacific Region. The original regional framework supports countries in implementing GVAP by consolidating all regional and global immunization goals, describing priority actions and highlighting strategies essential to achieve the goals and to strengthen immunization programmes in the Region. Though polio-free status is maintained, significant immunity and/or surveillance gaps are noted at the subnational level. There is ongoing transmission of measles virus and increased risk of congenital rubella syndrome in some countries with large populations. Sustainability of maternal and neonatal elimination is a key challenge. A total of 21 countries and areas have been verified as having achieved the hepatitis B control goal. Many countries have made significant progress in immunization coverage, but stagnation or falling coverage has been noted in many countries. Laboratory-supported surveillance for vaccine-preventable diseases (VPDs) targeted by new vaccines is insufficient.

2.2.2 UNICEF regional updates on strengthening immunization systems

Dr Wang Xiaojun presented the UNICEF regional priorities in strengthening immunization systems. The 2016–2030 strategy for health identifies strengthening health systems as one of three approaches. Vaccination coverage is a key equity tracker for universal health coverage. Making immunization systems strong would involve ensuring vaccine security, enhancing immunization supply chain systems and improving coverage and equity. Reaching the unreached and closing inequities in immunization requires identifying the programmatic risks, systematic planning and persistent actions to mitigate risks. Use of data, both basic and new approaches, is key to identifying the risks and monitoring progress. Demand generation, better understanding of the unreached and communication approaches are vital. Identifying the different types of vulnerable groups and reasons behind the low uptake of vaccination are important factors to better understand the unreached.

2.2.3 Expanded Programme on Immunization (EPI) overview in the PICs

Dr Sodoo Demberelsuren presented an overview of EPI in the Pacific by summarizing the progress made towards achieving and sustaining the WHO regional immunization goals.

Implementation of six out of eight regional immunization goals is on track in the Pacific. Progress in meeting the regional vaccination coverage goal has been slow, although both national and district vaccination coverage regional targets were met in eight PICs (40%).

The top three issues in the Pacific identified are: vaccination coverage disparity between countries and even within the country, weak performance of surveillance for VPDs and adverse events following immunization (AEFI) and chronic human resources (HR) issues.
Despite the progress made in the Pacific, more work is needed: to address vaccination inequity; and to strengthen surveillance systems for VPDs and AEFI, as well as immunization systems including local capacity for planning, implementing and monitoring the national immunization programme (NIP) at national and subnational levels.

2.3 Sustaining polio-free status

2.3.1 Sustaining polio-free status and implementation of the polio endgame strategy in the Western Pacific Region

Dr Tigran Avagyan presented the regional update on sustaining polio-free status and implementation of the *Polio Eradication and Endgame Strategic Plan* in the Western Pacific Region. During the global polio switch window in 2016, 15 countries and areas switched from the trivalent oral polio vaccine (tOPV) to the bivalent oral polio vaccine (bOPV) plus one dose of inactivated polio vaccine (IPV) schedule, while the remaining countries have benefited from a full dose of IPV. According to a polio risk assessment done at the national level, two countries (Papua New Guinea and Philippines) were assessed as a high risk for polio importation in the Region. Although the Western Pacific Region has sustained its polio-free status since 2000, gaps exist in population immunity against polio and acute flaccid paralysis (AFP) surveillance performance. There is a need to ensure availability of resources to maintain achievements and sustain polio essential functions after global eradication of polio. All countries and areas are requested to complete a laboratory inventory and strengthen national capacity of outbreak preparedness and response in addition to ensuring high vaccination coverage and functional AFP surveillance.

2.3.2 Country experiences

2.3.2.1 French Polynesia

Dr Sabrina Chanteau presented the country experience of French Polynesia on sustaining polio-free status. French Polynesia has a population of 275,918, and 36% of the total population is aged under 20 years. Mandatory polio vaccination in French Polynesia started in 1992. Currently, five doses of IPV are administered – at 2 months, 4 months, 10 months, 6 years and 10 years of age. Polio vaccination coverage of four primary and one booster doses of IPV was assessed at 97.7% according to an immunization coverage survey in 2017. Although general surveillance for communicable diseases is quite effective, AFP is not included in the syndromic surveillance. French Polynesia has not reported any AFP case for the past 10 years, although there have been at least seven cases. The country is planning to conduct various capacity-building activities such as refresher trainings and improving existing communication channels.

2.3.2.2 New Caledonia

Dr Anne Pfannstiel presented the experience of New Caledonia on sustaining polio-free status. New Caledonia has population of 278,500 with an annual birth cohort of 4,271. Mandatory polio vaccination started in 1980 with IPV. Currently, primary doses of IPV are administered at 2 months, 4 months and 11 months of age and two booster doses at 6 and 11 years of age as combined vaccines with other antigens (pentavalent, hexavalent, DTP-IPV or dTP-IPV). An immunization coverage survey is conducted every 5–6 years, and polio vaccination coverage was assessed as above 98% all the time.

AFP surveillance in New Caledonia is meeting WHO requirements in terms of the non-polio rate, although the population size is small. The main concern is specimen transportation to the laboratory, which is located overseas, as well as the 60-day follow-up examination. Better collaboration and
coordination with the referral laboratory and hospital outside of the country is needed to improve AFP surveillance performance of New Caledonia.

2.3.2.3 Conclusions and recommendations from the Subregional Committee for Certification (SRCC) of Polio Eradication in Pacific Island Countries and Areas and Western Pacific Region Technical Advisory Group (TAG)

Dr Lisi Tikoduadua, as chairperson of the Subregional Committee for Certification (SRCC) of Polio Eradication in Pacific Island Countries and Areas, presented the conclusions and recommendations of the latest SRCC meeting.

Quality surveillance for AFP in the PICs is sustained at a high level for most key performance indicators. However, performance varies among the countries with some of them not reporting AFP cases in the previous 10 years. PICs and areas are requested to plan and implement actions to close immunity and AFP surveillance gaps. WHO is requested to provide support on completion of the laboratory inventory, update the polio risk assessment methodology and achieve regular reporting.

Dr Tigran Avagyan presented the conclusions and recommendations from the Technical Advisory Group (TAG) on sustaining polio-free status in the Western Pacific Region. Although the Region has made substantial progress, the TAG recommends that all countries achieve high (> 90%) polio vaccination coverage, maintain AFP surveillance performance at the WHO standard, and update their polio importation preparedness and response plans to include risk assessment of importation.

2.4 Immunization coverage levels

2.4.1 Improving immunization coverage in the Western Pacific Region

Dr Ananda Amarasinghe presented the progress and achievements in immunization coverage and strategies to improve immunization coverage in the Region. As of 2017, 18 countries and areas have achieved diphtheria-tetanus-pertussis (DTP) vaccine coverage of 95% or above. However, only 12 countries and areas in the Region reached three-dose (DTP3) coverage of 90% or above in all districts. Uneven immunization coverage across and within countries will lead to immunity gaps among the community and pose a risk of VPD outbreaks. Vaccine stock-outs, reasons for stock-outs and possible impact on immunization coverage were highlighted. Strengthening core components of immunization system and immunization programmes including routine immunization is necessary to improve immunization coverage in the Region. Strategies to improve immunization coverage include: periodic intensification of routine immunization, global routine immunization strategies and practices, reaching every district, second-year of life platform, reducing missed opportunities of vaccination, regional immunization weeks, and addressing vaccine hesitancy through demand generation.

2.4.2 Country experience: Marshall Islands

Ms Daisy Pedro, National Immunization Program Manager, presented on the Marshall Islands experience on reporting of routine vaccination coverage. Overall country immunization coverage has significantly improved in the past few years. The coverage for DTP3 has improved significantly from 36% in 2013 to 80% in 2017. Measles-containing vaccine first dose (MCV1) coverage has improved from 70% in 2013 to 83% in 2017. Challenges to sustaining high vaccination coverage over time are: significant dropouts after the first dose, limited human resources with high turnover and accessibility to outer islands. Further, immunization registry issues are of concern.

Solutions proposed to overcome the challenges are: mapping systematically the dropouts and addressing identified reasons for dropouts; increasing demand generation through health education
and public awareness through media; providing incentives for staff; intensifying supervision for problem-solving with on-the-job training; mobilizing funds for transport; and increasing outreach activities.

2.4.3 Country experience: Tuvalu

Ms Alaita Taulima, Hospital Sister/EPI Implementing Officer, presented the Tuvalu experience. Country immunization coverage is high at over 95% for all infant vaccinations. Key EPI successes included no vaccines stock-outs, highly motivated mothers with timely vaccination, and external financial and technical assistance. Polio and VPD training programmes are used in capacity-building for health-care workers. An annual EPI award has motivated staff towards high-quality immunization service.

Challenges to sustaining high vaccination coverage are: financial constraints; issues in access to islands and for home visits; limited human resources; poor communication facilities at the outer islands; lack of a proper EPI database; weak surveillance system; and population movement. Proposed solutions are: ensuring availability of transport to service delivery points; appointing an officer responsible for EPI; increasing supervisory visits to outer islands; updating the immunization policy; reviewing the surveillance system; and identifying a data storage system for immunization and trainings.

At the end of the session, deliberations were focused on immunization service delivery issues at the field level in PICs, including limited human resources, accessibility to widespread islands and thereby transport of vaccines. Participants expressed the value of continued technical assistance from partners for implementing strategies to improve immunization coverage.

2.5 Health security and emergencies

2.5.1 Overview of health security risks in the Pacific and International Health Regulations (IHR)/Asia Pacific Strategy for Emerging Diseases (APSED)

Dr Angela Merianos presented an overview of the health security risks and IHR/APSED in the Pacific. Epidemics and very high risk of disasters, global emerging infectious disease risks and potential resurgence of elimination diseases and outbreaks, and extreme weather events are key risks to health security. Over the last four years, the Pacific has experienced 169 outbreaks. Self-assessment of IHR core capacities shows a consistent pattern of improvements over time. However, wide variation across PICs has been noted. The Pacific Healthy Islands vision aligns well with IHR. In the Pacific, under the Asia Pacific Strategy for Emerging Diseases and Public Health Emergencies (APSED III), all PICs will have in place the core public health capacities and capabilities necessary to detect, assess and respond to their common epidemic-prone diseases/sudden-onset emergencies and arrangements with regional response partners for early technical assistance and surge capacity in the event of a transnational threat or disaster. The Pacific Health Security Coordination Plan (PaHSeC) is a partner response to a need identified by PICs and partners for more coherent and coordinated support to countries in implementing IHR through APSED III.

2.5.2 Update on VPD outbreaks in the PICs

Dr Jayaprabha Valiakolleri gave an update of the VPD outbreaks in the Pacific since the last immunization programme managers meeting. Many countries in the Pacific, including the Federated States of Micronesia, Fiji, Marshall Islands, Tonga, and Tuvalu experienced mumps outbreaks. The Federated States of Micronesia and Marshall Islands have included mumps-containing vaccine in their
routine immunization programme, while other countries do not administer mumps vaccine. In the outbreak in the Federated States of Micronesia, it was noted that the majority of cases had received at least one documented dose of mumps-containing vaccine. Supplementary immunization activities (SIAs) were part of the outbreak response in the Federated States of Micronesia and Marshall Islands. Hepatitis A outbreaks were reported in the Marshall Islands and Tuvalu. Fiji experienced an outbreak of meningococcal disease in 2017 and 2018. Kiribati experienced a rotavirus outbreak; stool specimens from initial cases were tested and samples tested positive for rotavirus.

2.5.3 Meningococcal meningitis outbreak in Fiji: epidemiology and vaccine procurement

Dr Torika Tamani presented on the meningococcal vaccination campaign in Fiji. A total of 52 confirmed and suspected cases of meningitis were reported in 2017 and 47 from January to April 2018. Fiji’s outbreak response included: (i) formulation of a taskforce committee; (ii) development of a meningococcal infection management guideline for clinicians at the subdivisional level, which included the antibiotic treatment guideline with ceftriaxone, and the prophylactic treatment with rifampicin, which was given as prophylaxis for contacts; (iii) awareness campaign for public and health workers; and (iv) ring-fencing vaccination for localized cases. The same quadrivalent vaccine MENACTRA was used to contain the second school outbreak at Navesau secondary school in Korovou/Ra in 2018 and also in Kioa Island in 2018. In addition, a nationwide vaccination campaign targeting children aged 1–19 years was rolled out, as well as the monovalent meningococcal vaccine (Neisvac-C & Menjugate) used nationwide. Current global vaccine stocks are low, and the International Coordinating Group (ICG) on vaccine provision for meningococcal disease must give permission before any country can procure the vaccine. The current market price of the vaccine is very high at 100–190 Fijian dollars per dose. The cost for the national roll-out targeting the age group 1–14 years is more than 8 million Fijian dollars.

2.5.4 Outbreak response for meningococcal meningitis and typhoid fever

Dr Nyambat Batmunkh presented the outbreak response immunization on the example of two diseases including meningococcal meningitis and typhoid fever. There are five fundamental principles of communicable disease control in emergencies, and the presentation concentrated on outbreak control. Case definitions for meningococcal meningitis and typhoid fever were provided from the revised surveillance guidelines for VPDs as well different types of outbreaks. Dr Nyambat provided more detailed information on the two diseases on how to control the outbreak, how to select vaccines and where to order these vaccines in the short time period. He explained about the ICG, which is based in WHO headquarters, tasked to manage and monitor security stocks of vaccines and provide forecasting of epidemics and evaluation of interventions. In addition, updated information from position papers were presented and some experiences on outbreak control from other countries in the region were shared with participants.

2.5.5 Health systems preparedness and resilience towards natural disasters

Dr Angela Merianos in her presentation noted that with climate change PICs are at high risk from disasters with increased risk of outbreaks of climate-sensitive and water-related diseases. For some PICs, shorter recovery times between emergencies is increasing vulnerability, decreasing resilience and pushing communities into greater social and economic disadvantage. The largest impact is on the marginalized, women, children, elderly and disabled populations. There are high expectations for health systems to respond quickly and effectively in emergencies, including in the provision of continuing health services. Resilience in the context of disaster risk is the ability of a system, community or society exposed to hazards to resist, absorb, accommodate, adapt to, transform and
recover from the effects of a hazard in a timely and efficient manner. A well-functioning health system improves the health status of individuals, families and communities and defends the population against what threatens its health.

2.5.6 Summary of the PIC self-assessment findings on immunization component of Joint External Evaluation (JEE) tool

Dr Angela Merianos presented the summary of Pacific countries’ self-assessment findings on the immunization component of the JEE tool. JEE is a voluntary component of the new IHR Monitoring and Evaluation Framework (IHR MEF) and is designed to more objectively assess country capacities to prevent, detect and rapidly respond to public health threats using a multisectoral and evidence-based approach. The initial self-assessment against the JEE immunization indicators by 17 of the 20 PICs determined that all had “developed capacity” or higher. However, this assessment was made without assembling the evidence needed for objective evaluation. Such evidence would include: national and subnational immunization coverage data; immunization information systems; surveillance systems; risk assessment and case/cluster investigation reports; information, education and communication (IEC) materials; supply chain management; vaccine safety data and documents; human resources; budget lines in national health plans; after-action reviews of acute events such as AEFI; VPD clusters/outbreaks; and contingency plans.

2.6 Measles and rubella elimination including response to measles and rubella outbreak

2.6.1 Regional update on measles and rubella elimination

Dr Yoshihiro Takashima in his presentation noted that the lowest incidence of measles was reported in 2012. The WHO Western Pacific Region was affected by a region-wide measles resurgence starting 2013; China, Malaysia and the Philippines experienced increased ongoing transmission. Importation caused large-scale or multiple outbreaks in many countries where interruption of measles transmission had been achieved or measles incidence had been low. For example, importation re-established endemic transmission in Mongolia in 2015 where interruption of measles transmission had been achieved and verified in 2014 and in Papua New Guinea and Viet Nam where measles incidence had become very low. Australia, Brunei Darussalam, Cambodia, Hong Kong SAR (China), Japan, Macao SAR (China), the Republic of Korea and New Zealand have been verified as having achieved measles elimination between 2014 and 2017. The Lao People’s Democratic Republic, PICs and Singapore are approaching measles elimination, but with surveillance gaps. Changing measles epidemiology is another key challenge.

The Republic of Korea and New Zealand have been verified as having achieved rubella elimination in 2017. The lowest rubella incidence was reported in 2017. Congenital rubella syndrome surveillance is weak or non-existent in many countries.

2.6.2 Country experiences

2.6.2.1 Measles outbreaks in the Pacific

Dr Jayaprakash Valiakolleri provided an overview of measles outbreaks in the Pacific. Following the catch-up campaign in 1998/99 by 14 countries targeting the age group 1–14 years, measles outbreaks were infrequent and limited to selected countries. Fiji experienced an outbreak in 2006; until 2014, there were no outbreaks in the PICs. However, in 2014, three countries experienced outbreaks, the first reported in the Federated States of Micronesia. Genotypic evidence confirmed (type B3) that the outbreak was imported from the Philippines. The second outbreak was in Solomon Islands imported from Papua New Guinea. Swift outbreak response measures were undertaken in both countries,
including SIAs. The third outbreak was in Vanuatu with 10 cases of measles, the first two reported from a Solomon Islander family living in Vanuatu coming in contact with a visitor from Solomon Islands. All three outbreaks were contained within 2–3 months. In 2015, Vanuatu experienced a fresh outbreak that affected many provinces.

2.6.2.2 Country experience: Kiribati
Ms Nikarawa Nanimatang-Karoua provided an update on the Kiribati experience with measles elimination. Measles vaccine was introduced in 1983, measles–rubella (MR) vaccine in 2004, and the second MR vaccine in 2007. Routine immunization coverage over the last five years with two doses of MR vaccine has been suboptimal. The last measles SIA was conducted in 2009. The Ministry of Health and Medical Services is planning to conduct SIAs targeting those aged 1–14 years based on the measles susceptibility profile. The SIAs are planned in February 2019, depending on funding and technical support from partners. The Ministry has estimated the budget and is seeking funding support from partners. The country has established a coordinating committee for this purpose and is working on developing social mobilization materials. The total funding support is a little over US$ 100 000.

2.6.2.3 Country experience: Samoa
Dr Tito Kamu presented the Samoa experience with measles elimination. Measles, mumps and rubella (MMR) vaccine was first introduced in 2000. The vaccine is given by registered nurses. The cold chain storage is excellent, and no issues have been noted with supply chain management. MMR coverage ranges from 80% to 90%. Cases are picked up through syndromic surveillance and when they present to the paediatric clinic with suspected measles. Health literacy is limited, which results in parents not bringing in children for vaccination. Constant migration between urban and rural areas makes identifying and reaching unreached children difficult.

Samoa has had AEFI. Two children in one family developed haemophagocytic lymphohistiocytosis (HLH) following MMR vaccination. Recently, two different families lost their children after MMR vaccine was given. Investigations in this regard are ongoing. MMR vaccine administration is on hold as per Ministry of Health orders while they examine why the events occurred and before MMR vaccination can resume.

2.6.3 New regional strategy and action plan for measles and rubella elimination in the Western Pacific
Dr Yoshihiro Takashima explained that the TAG in 2015 recommended that WHO update the current regional plan of action. Following this, a series of consultations were held and the Regional Committee for the Western Pacific endorsed the new regional strategy and action plan in 2017. To address and overcome the issues and emerging challenges identified in the Region and to accelerate the achievement of and promote sustainability of both measles and rubella elimination, the new regional strategic document proposes 31 strategies with accompanying activities in eight strategic areas: (i) overall planning and immunization system; (ii) immunization; (iii) epidemiologic surveillance; (iv) laboratory support; (v) programme review and risk assessment; (vi) outbreak preparedness and response; (vii) partnership, advocacy, IEC and social mobilization; and (viii) progress monitoring and verification of elimination. The plan recognizes the diversity of settings, epidemiological situations and individual challenges of countries. Each country is suggested to select the proposed actions from within the regional plan to create a national plan.
2.6.4 Conclusions and recommendations from the Subregional Verification Committee (SRVC)

Dr Lisi Tikoduadua presented the conclusions from the SRVC:

1. Although there continues to be no evidence of ongoing endemic measles transmission and PICs have established a high level of measles immunity across broad age groups, measles virus surveillance is not yet at verification standard, and there are still persistent immunity gaps among specific populations.

2. Measles and rubella elimination can be feasibly achieved in PICs by the target date of 2022; the SRVC commits to their role in advocacy and supporting implementation of recommendations at the country level to achieve this goal.

3. The SRVC should work with WHO in developing a subregional strategy and plan of action for achieving and sustaining measles and rubella elimination by 2022, to be presented to the TAG.

The Committee further made recommendations for all countries with specific recommendations for Kiribati, New Caledonia and Vanuatu, as well as ones for WHO.

2.7 Introduction of new vaccines

2.7.1 Regional updates on new vaccine introduction

Dr Nyambat Batmunkh gave an overview of available new vaccines and introduced new vaccines globally and in the Western Pacific Region including PICs. He presented and discussed the progress towards achieving the GVAP new vaccine target that all low- and middle-income Member States introduce at least one new vaccine during 2010–2020. *Haemophilus influenzae* type b (Hib), human papillomavirus (HPV), Japanese encephalitis (JE), pneumococcal conjugate and rotavirus were considered as new vaccines. In addition, he presented key issues to consider during the decision-making process: a summary of economic tools, planning process, choice of immunization strategy, and monitoring and evaluation. Countries in the Region continue to make progress in introducing new vaccines, though new vaccine introduction by upper-middle-income countries lags substantially behind that in low- and lower-middle-income countries. Sources to support new vaccine introduction and sustainability in middle-income countries in the Region need to be identified.

2.7.2 Country experiences

2.7.2.1 Country experience: Kiribati

Ms Nikarawa Nanimatang-Karoua from Kiribati presented the country’s experience with rotavirus vaccine introduction. Considering the disease burden of acute gastroenteritis in the country, Kiribati introduced rotavirus vaccine into their routine immunization programme as part of a comprehensive strategy to protect, prevent and treat diarrheal diseases in 2015. By introducing the rotavirus vaccine, a total of 6483 children aged under 1 year of age directly benefited from two doses of the vaccine provided between August 2015 and December 2017, and there was a substantial impact in disease burden of acute gastroenteritis among young children. The capacity to deliver quality and timely newborn, maternal and nutrition interventions at health facility and community levels was also strengthened. She summarized key issues in delivery strategies, communication and advocacy activities, training and orientation, implementation and delivery, monitoring and evaluation, funding and sustainability, and lessons learnt regarding facilitators for and challenges to the introduction.
2.7.2.2 Country experience: Solomon Islands
Ms Jenny Gaiofa from Solomon Islands presented the country’s experience with recent new vaccine introductions. Solomon Islands introduced PCV in 2016 and is planning to introduce two new vaccines including HPV and rotavirus vaccines in 2019. In addition, she gave an overview of: mortality in Solomon Islands due to cervical cancer, key issues in decision-making to implement the pilot introduction of HPV vaccine conducted in 2015, the scope of the pilot project, pre-implementation (including microplanning, funding and training) and implementation issues (including communication, vaccine management and delivery strategies), monitoring and evaluation, and lessons learnt regarding facilitators for and challenges to the demonstration project. The presentation generated a lively discussion about issues related to HPV introduction in Pacific island countries.

2.8 VPD surveillance

2.8.1 Revised VPD surveillance guidelines
Dr Nyambat Batmunkh presented the basic principles of public health surveillance and its objectives, types and benefits, especially for VPD surveillance. He also provided updates on the current status of VPD surveillance in the Western Pacific Region. In addition, he presented the history and overview of previous WHO VPD surveillance standards followed by the most recent updates to the global guidance on standards for surveillance based on available vaccines and latest laboratory techniques. The updated guideline for VPD surveillance will consist of two parts – the surveillance introduction chapters and disease-specific chapters (22 VPDs) – and will be available in late August 2018.

2.8.2 VPD surveillance in the PICs
The EPI unit in the WHO Regional Office for the Western Pacific coordinates with five regional VPD laboratory networks, consisting of over 500 public health laboratories for: polio (43) since 1992, measles and rubella (385) since 2001, Japanese encephalitis (20) since 2009, and rotavirus (32) and invasive bacterial VPDs (20) since 2010. Faced with reduced financial support from donors, promoting national ownership of laboratory surveillance programmes to sustain high-quality laboratory testing for VPDs is essential. The focus of PICs should be support for priority countries that are more prone to measles and rubella outbreaks and have underperforming surveillance so as to strengthen capacity for case detection, investigation and specimen collection, access to reference laboratory for testing, strengthen laboratory confirmation of measles and rubella cases, as well as obtain genotype data. Non-polio laboratories should comply with the Global Commission for the Certification of the Eradication of Poliomyelitis recommendations and complete national inventories to identify facilities that handle and store potentially infectious materials that may contain poliovirus type 2 by the end of April 2019.

2.9 Data management

2.9.1 E-health and electronic immunization registry in the PICs
Ms Katri Maria Kontio, Health Information Systems, Division of Pacific Technical Support, WHO Regional Office for the Western Pacific, via videoconference gave a presentation on: how e-Health is being used in immunization to collect data and generate coverage, disease and AEFI surveillance, effective vaccine management, continuing education and training, and social mobilization. An electronic immunization registry (EIR) provides information on individuals, vaccines and each vaccination by national or subnational level. The EIRs can also produce the data required for translational research on vaccines and immunization. There are online and/or offline options and stand-alone or integrated with other health information systems. The PICs are still in the early stages
of developing e-health, but are gradually improving their health information systems. E-governance reforms and e-health strategy development are ongoing or under discussion in several PICs, and a few countries in the Pacific have individual based EIRs. Fragmented databases and registries, poor infrastructure, the lack of unique identifiers and national electronic health records, and maintenance and sustainability are challenges to the PICs in improving their health information systems and EIRs.

2.9.2 Overview of WHO-UNICEF Joint Reporting Form (JRF) submission by PICs

Dr Roberta Pastore, EPI, WHO Regional Office for the Western Pacific, via videoconference provided an update on the WHO-UNICEF Joint Reporting Form, which collects annually information on immunization programmes and VPDs. JRF includes core questions and some region-specific questions; it is available in English and French. The questions are grouped in broad areas such as disease incidence, immunization coverage, programme indicators, etc., and the Form is reviewed and revised at the global level once every two years. JRF contributes to WHO/UNICEF estimation of national immunization coverage (WUENIC) and to monitor regional and global immunization targets, guiding global/regional immunization strategies and setting priorities, as well as planning by partners. The quality of data (incomplete or inconsistent and accuracy of information) in JRF and timeliness in reporting remain challenges and points for improvement.

2.9.3 Group work on JRF and feedback

The participants in groups discussed the country performance, challenges and solutions to improve JRF. The following challenges in reporting JRF were identified: (i) clarity of the instructions – either too technical or complicated; (ii) lack of understanding by the staff as no training or orientation received on JRF; (iii) too many data and information requested, some are repetitive; and (iv) data requested are not readily available at one place or within EPI and therefore access to required data is time-consuming.

The participants suggested the following to improve JRF quality and reporting: (i) provide clear instructions and training to the staff; (ii) make available JRF online; (iii) send JRF forms to the countries by January every year and consider submission date by April; (iv) allow phase-based submission of JRF and provide early feedback; and (v) improve internal data collection process through better coordination with different administrative and programme units. The WHO Regional Office has informed the participants that informal coaching can be provided remotely in response to country requests. Countries are encouraged to submit the Form as complete as possible by the due date, with pending minor information and revisions provided later.

2.10 Effective vaccine management

2.10.1 Immunization supply chain in the PICs: stock management and vaccine logistics

Mr Murat Hakan Ozturk in his presentation explained that national immunization supply chains in the Pacific are initially designed to manage fewer vaccines and lower coverage rates. They are not keeping pace with the increased complexity, changing landscape and required high coverage targets of immunization programmes. Additionally, cold chain management is a major challenge given the logistical and developmental context. Cold chain management is critical to ensure potency of vaccines. National supply chains in the Pacific are facing serious challenges in terms of limited human resources, insufficient funding, lack of data, weak cold chain infrastructures and inadequate vaccine management capacity. PICs can benefit from new comprehensive effective vaccine management and continuous improvement planning approaches led by WHO and UNICEF.
Moreover, there have been considerable developments for cold chain equipment and temperature monitoring technologies that might be beneficial to Pacific countries in the near future.

2.10.2 Country experiences

2.10.2.1 Cook Islands
Ms Rufina Tutai presented the Cook Islands experience with vaccine management. The country has not conducted an external full effective vaccine management assessment. Country self-assessment is being carried out regularly. The vaccine arrival procedure is carried out by pharmacy staff at the national level. Temperature monitoring is documented twice a day. The cold chain and dry storage capacity is good, and there has been no issue. Vaccine management has been very good and the immunization policy is very carefully followed. Supportive supervision to outer islands needs strengthening. Though an information system is in place, it still needs to be strengthened. There was a stock-out of HPV vaccine in 2017 due to the short shelf-life of the vaccine. Cook Islands would continue to maintain the current effective vaccine management, which is self-assessed to be working well, and strengthen the communication system.

2.10.2.2 Federated States of Micronesia
Mr Carter J. Apaisam presented the Federated States of Micronesia experience with supply chain management. The national immunization programme was established in 1947. Funding support is from the United States Centers for Disease Control and Prevention (US CDC). Government funds are used only for bacille Calmette–Guérin (BCG) vaccine and its dry supplies. The country requests stock allocation on a quarterly basis to US CDC. At the national and four state-levels, storage capacity is assessed/ordered on a monthly basis. Shipping of vaccines and diluents including other dry supplies to the states is done on a monthly period. Except BCG vaccine, other routine vaccines do not have vaccine vial monitors. Temperature loggers are used for close monitoring and to ensure vaccines are safe and effective. The country has not conducted a full-scale effective vaccine management assessment and requests assistance from technical partners. In some states, vaccine storage sites are not connected to the hospital back-up generators and need a contingency plan to protect the vaccines in an emergency.

2.10.2.3 Overview and updates on Vaccine Independence Initiative since 2016 and vaccine security update
In his presentation, Mr Murat Hakan Ozturk defined vaccine security as the assurance of availability of required vaccines, at right quantities, affordable prices, right condition, right time and the desired quality level. Accurate forecasting, timely availability of funds, adequate information on products and appropriate procurement mechanism are critical to ensure vaccine security. The UNICEF Vaccine Independence Initiative (VII) has been ensuring vaccine supply security for member Pacific island countries since 1995. Bridge-financing (VII credit lines) and the regional buffer stock are important mechanisms to prevent stock-outs of vaccines at the national levels in the Pacific.

Success of VII in the Pacific relies on dedication and rigour of all Pacific countries to important annual operational milestones such as forecasting, placing of orders and payment of invoices. Because of the pooled nature of the VII mechanism, delayed or incomplete actions from any country might affect supply security negatively for all other Pacific countries.
2.11 Technical advisory body in the Pacific

2.11.1 National immunization technical advisory groups (NITAGs) including experience from the Caribbean Immunization Technical Advisory Group (CiTAG)

Dr Nyambat Batmunkh presented an overview of NITAGs in the Region, including the experience from CiTAG, which was recently established. Both the Regional Committee and TAG for the Western Pacific have requested Member States to strengthen the functionality and effectiveness of NITAGs or equivalent immunization decision-making bodies to support formulation of evidence-based immunization policies. NITAGs in the Western Pacific Region operate at varying levels of quality. Some are advanced with clear policies and processes and make use of best evidence-based decision-making practices; others are newly formed. Some lack independence of membership, structure and procedures, and have challenges arriving at sound recommendations. There have been positive examples of success towards having an effective immunization decision-making body in each country, but more needs to be done to meet the regional objective. Establishment of CiTAG in the Caribbean island countries was successful; this mechanism might be useful for PICs.

2.11.2 Country experience: Fiji

Dr Torika Tamani from Fiji presented the country experience with their decision-making process towards new vaccine introduction. It involves several committees, including the National Vaccine Preventable Diseases Committee, National Medicines and Therapeutics Committee, Paediatric Clinical Service Network and an Interagency Coordination Committee (ICC) in Fiji, which is equivalent to NITAG with the main functions of vaccine introduction, funding support negotiation, cold chain infrastructure, SIAs, changes to the immunization schedule, other EPI discussions and vaccine supply and distribution. In addition, Dr Tamani provided examples of latest new vaccine introduction processes as well as challenges for evidence-based decision-making towards new vaccine introduction.

2.12 Vaccine safety

2.12.1 Global and regional updates on vaccine and injection safety

Dr Ananda Amarasinghe presented the basic concepts in vaccine safety and the importance of understanding AEFI and their surveillance. Regulatory measures are in place to ensure vaccine quality, and the need for maintaining cold chain is highlighted. Countries can make use of global and regional resources and tools, including guidelines on immunization safety surveillance and communication, WHO position papers, vaccine reaction rates information sheets, aide-memoires and training modules. The WHO Global Advisory Committee on Vaccine Safety provides technical updates on vaccine safety events with global and regional interests. As of 2017, surveillance of AEFI is in place in 24 countries and areas in Western Pacific Region. The underreporting of AEFI in PICs is significant. Thus, ensuring vaccine safety will require improving AEFI reporting, timely and comprehensive investigation, data analysis and training on safe immunization practices.

2.12.2 Vaccine waste management

Dr Hassan Nasir presented on the principles and practices in the context of immunization waste, describing the types of health-care and medical waste, the hazards caused by wastes, need of waste management and methods. Waste management encompasses storage, collection, transport, treatment and disposal. The challenges of health-care waste management in the Pacific are lack of policy and guidelines, poor staff and public understanding of the risks of waste, lack of appropriate technology
for waste management, and financial constraints. Waste from EPI contributes to the overall medical waste, and therefore EPI managers should be part of the national waste management programme.

2.13 Communication, advocacy and social mobilization

2.13.1 Routine communication

Communication is a specialized discipline aiming to contribute and facilitate health-seeking behaviours. The challenges to reach every child with vaccinations require a deep understanding of the service delivery system as an encounter of supply and demand. The experience at the point of service can positively or negatively influence demand and trust. As a continuum process, individuals and communities will differ in their willingness to access vaccination, from refusal, to hesitance, passive acceptance or active demand. Evidence of this status is a key for the effectiveness and appropriateness of communication strategies aiming to promote access to immunization services as desired and expected by social norms. Communication systems require capacities to respond to emergencies. The earlier health systems achieve acceptable standards of preparedness, the better the capacity to respond to crises will be. Engaging communities as part of risk communication systems is a key to build resilience and reduce the impact of emergent events on the population health.

3. CONCLUSIONS AND RECOMMENDATIONS

3.1 Conclusions

Immunization coverage levels

Fourteen PICs maintain high immunization coverage of DTP3 of at least 90% in 2017, which is the target of the GVAP. Uneven immunization coverage across the Pacific and within countries remains a challenge to reach the global and regional VPD immunization coverage targets.

Polio eradication and sustaining polio-free status

Although polio-free status is maintained in the Region, acute flaccid paralysis (AFP) surveillance performance in most Pacific countries does not meet the WHO standard. This poses potential risks of either wild poliovirus importation or circulating vaccine-derived poliovirus (cVDPV) outbreak.

Health security and emergencies

1. Health is a major concern in almost all emergencies, and there are high expectations for health systems to respond quickly and effectively, including in the provision of continuing health services. High immunization coverage provides primary prevention against diseases such as measles in populations displaced by disasters, thereby reducing their vulnerability to outbreaks in the post-disaster period and contributing to community resilience.

2. Gaps in International Health Regulations core capacities of countries uncovered by the Ebola outbreak in West Africa in 2014-15 renewed the global momentum to strengthen global health security and accelerate implementation of IHR (2005).

3. The initial self-assessment against the JEE immunization indicators conducted by 17 of the 20 PICs determined that all had “developed capacity” or higher; however, this assessment was made without assembling the evidence needed for objective evaluation.
**Measles and rubella elimination**

There continues to be no evidence of ongoing measles and rubella virus transmission in the Pacific, while the Federated States of Micronesia, Solomon Islands and Vanuatu were affected by import-related measles outbreaks in 2013–2014. There are still persistent immunity gaps in some countries and areas, while high vaccination coverages against measles and rubella have been reported in the Pacific as whole. In addition, surveillance for measles and rubella has not yet reached verification standards.

**Data management**

PICs are in early stages and gradually improving their e-health information systems and EIRs. Fragmented databases and registries, weak infrastructure, maintenance and sustainability are challenges to implement both e-health information and EIRs. In 2017, 14 of the 20 PICs submitted timely WHO-UNICEF JRFs, which provide valuable information on performance in immunization and surveillance. The quality of data in terms of completeness and accuracy remains a challenge and needs improvement.

**Vaccine safety**

1. AEFI surveillance is in place in 10 PICs. Improving AEFI reporting, timely and comprehensive investigation, and staff capacity on safe immunization practices are areas requiring attention in vaccine safety.

2. Waste from EPI contributes to the overall medical waste; therefore, EPI is a part of the national health-care waste management programme. Use of appropriate methods, the geographic spread of islands and climate change are challenges in wastage management in the Pacific.

**New vaccine introduction**

Introduction of new vaccines in PICs continues to be done through country-level decision-making and implementation process through different funding channels. The Asian Development Bank (ADB) is working on supporting selected PICs. However, there are still challenges with new vaccine introduction, particularly ensuring enough financial resources for the sustainable introduction of new vaccines.

**Technical Advisory Group on immunization in the Pacific**

Participants affirmed the need for an independent evidence-based decision-making process in immunization policies in the Pacific.

**Vaccine-preventable disease surveillance**

Some PICs made progress towards polio and measles surveillance indicators. VPD surveillance needs to be strengthened to achieve and maintain disease eradication, elimination and control goals in the Pacific.
**Immunization supply chain and effective vaccine management**

1. PICs can benefit from new comprehensive effective vaccine management and continuous improvement planning approaches led by UNICEF and WHO.

2. The UNICEF Vaccine Independence Initiative (VII) has been ensuring vaccine supply security for member Pacific island countries since 1995.

3. National supply chains in the Pacific are facing serious challenges in terms of limited human resources, insufficient funding, lack of data, weak cold chain infrastructures and inadequate capacity in effective vaccine management.

**Communications, advocacy and social mobilization**

Progress of immunization programmes in the region is constantly challenged by the need to overcome vaccine hesitancy and reach all communities. In-country capacities to manage risk communication plans, preparing, responding and recovering from vaccine-related outbreaks are limited.

**3.2 Recommendations**

**3.2.1 Recommendations for Member States**

Member States are encouraged to consider the following:

**Immunization coverage levels**

1. Strengthen immunization system core functions and immunization programmes as platforms to improve immunization coverage in PICs.

2. Reduce inequities and improve immunization coverage by implementing available strategies.

**Polio eradication and sustaining polio-free status**

3. PICs are encouraged to enhance AFP surveillance at the country level by integrating it into either syndromic surveillance or existing surveillance system for communicable diseases.

**Health security and emergencies**

4. Use lesson learnt from after-action reviews of immunization services delivered as part of emergency responses to review and revise immunization implementation plans and operating procedures.

5. Maintain a watching brief of regional and global VPD outbreaks for national prevention, preparedness, surveillance and response efforts.

6. Complete the JEE self-assessment process by assembling the evidence needed for objective assessment of the immunization capacities.

**Measles and rubella elimination**

7. Countries with high risk to develop or update national strategies based on the latest WHO strategy and plans of action for measles and rubella elimination.
8. Prepare for an import-related outbreak of measles and rubella, through improvement of detection, reporting and investigation of suspected cases and prevention of and preparedness for nosocomial, school- and institution-based transmission of measles and rubella virus.

**Data management**

9. Plan and adopt e-health using a stepwise approach in alignment with country contexts to include considerations for the enabling environment (governance, strategy, policy and architecture), connectivity, capacity-building/workforce, sustainability (investment and partnerships) and system linkages (interoperability).

10. Improve the quality of the WHO-UNICEF JRF for completeness and accuracy of data and also maintain timeliness of reporting.

**Vaccine safety**

11. Develop national guidelines, build staff capacity on implementing safe immunization practices and establish and/or strengthen AEFI surveillance.

12. Develop and implement plans for health-care waste management including immunization waste.

**New vaccine introduction**

13. Consider or continue introducing new vaccines taking into account public health priority, implementation issues, funding and sustainability.

14. Governments to allocate enough funding to achieve and sustain a new vaccines introductions including timing of introduction, vaccine safety and delivery system while taking funding and country context into account.

**Technical Advisory Group on immunization in the Pacific**

15. Discuss the needs and possibility of forming an independent evidence-based decision-making process in immunization policies in the Pacific region during the 2019 Heads of Health Meeting.

**Vaccine-preventable disease surveillance**

16. Plan and implement actions to close surveillance gaps, with priority for those most at risk of VPDs (e.g. with suboptimal immunization coverage) or periodically experiencing VPD outbreaks.

17. Review the WHO guidance document and conduct laboratory inventory of potentially infectious materials for poliovirus and submit country reports by the end of April 2019.

18. For measles, start collecting adequate specimen (throat swabs) from every suspect case for virological testing (genotype data) to ensure all measles virus transmission is properly monitored.
**Immunization supply chain and effective vaccine management**

19. Give priority to immunization supply chain strengthening activities along with efforts to increase routine coverage and allocate enough funding and human resources for national immunization supply chains.

20. Initiate comprehensive effective vaccine management assessment and continuous improvement planning processes.

**Communications, advocacy and social mobilization**

21. Assess and strengthen capacities and mechanisms for a coordinated, coherent and strategic communication efforts aiming to improve immunity among prioritized population groups.

22. Integrate programming efforts aiming to leverage resources for effective roll-out of communications plans and boost operational capacities.

23. Generate, document and share evidence of what works and does not work along with their efforts to communicate and engage with communities aiming to improve their immunity, health and living conditions.

### 3.2.2 Recommendations for WHO, UNICEF and other development partners

WHO, UNICEF and other development partners are requested to consider the following:

**Immunization coverage levels**

1. UNICEF and WHO to conduct and support EPI reviews in at least two PICs for strengthening immunization systems.

2. Provide technical and other assistances to PICs in planning and implementing available strategies to improve immunization coverage.

**Polio eradication and sustaining polio-free status**

3. WHO and UNICEF to continue their provision of support for enhancing AFP surveillance through capacity-building activities.

**Health security and emergencies**

4. WHO and health security partners to continue providing technical support and donor partners to provide funding support to countries and technical partners.

**Measles and rubella elimination**

5. WHO and UNICEF to support countries and areas in developing or updating national strategies based on the latest WHO strategy and plans of action for measles and rubella elimination.

6. UNICEF and WHO to further strengthen their coordination and collaboration between technical partners and PICs in ensuring sufficient preparedness for and rapid and adequate response to outbreaks of measles and rubella in the Pacific.

7. All development partners to advocate and support measles and rubella elimination activities as a means to strengthen immunization programmes and overall public health systems.
Data management

8. Provide support in technical capacity-building and logistics to implement e-health information system and EIRs.

9. WHO and UNICEF to continue to provide technical support in improving data quality of JRF and provide detailed instructions to countries and timely reporting.

Vaccine safety

10. WHO and UNICEF to provide technical support for staff capacity-building in safe immunization practices and AEFI surveillance.

11. Development partners to provide support in developing and implementing plans on health-care waste management including immunization waste with appropriate methodology.

New vaccine introduction

12. Support countries to use introductions of new vaccines as opportunities to further strengthen maternal and child health and EPI programmes and enhance overall immunization systems and programmes.

13. Provide technical support to countries in implementation of new vaccine introduction.

14. Make efforts to mobilize sufficient financial resources to initiate introduction of new vaccines in the PICs.

Technical Advisory Group on immunization in the Pacific

15. Development partners to support PICs through facilitating discussion on forming an independent evidence-based decision-making process in immunization policies in the Pacific region during the 2019 Heads of Health Meeting.

Vaccine-preventable disease surveillance

16. Partners to support countries and areas in reaching an elimination standard surveillance for polio, measles and rubella, through strengthening capacity for case detection, investigation and specimen collection. Priority should be given to countries and areas that are more prone to importation of cases and outbreaks, and have underperforming surveillance. Partners to support countries and areas in conducting VPD surveillance reviews to identify gaps in surveillance of all VPDs, and develop and support improvement plans.

17. WHO, no later than end of August, to provide a brief summary guideline on conducting a laboratory inventory as described in the WHO guidance document together with a reporting form for submitting country reports to the SRCC Secretariat.

Immunization supply chain and effective vaccine management

18. WHO and UNICEF to provide required technical and financial support to the countries for comprehensive effective vaccine management assessment and continuous improvement planning.

19. UNICEF to continue sustaining VII in the Pacific to ensure supply security and regional solidarity. Partners to support UNICEF for mobilizing resources to strengthen VII operations and smoothly expand to cover new vaccines.
Communications, advocacy and social mobilization

20. Provide technical and other assistance to PIC efforts in strategic communication and risk communication aiming to strengthen the performance of routine immunization programmes, and achieve sufficient levels of readiness to respond to potential outbreaks.

21. Provide technical and other assistance to PICs on strengthening capacities in coordinated strategic communication and health promotion mechanisms, including human resources capacities to reach and engage with communities as active partners of health immunization systems.
ANNEXES

Annex 1. Provisional agenda

Tenth PACIFIC IMMUNIZATION PROGRAMME MANAGERS MEETING

Nadi, Fiji
30 July- 03 August 2018

PROVISIONAL AGENDA

1. Opening session
2. Global, regional and Pacific updates
3. Sustaining polio-free status
4. Immunization coverage levels
5. Health security and emergencies
6. Measles and rubella elimination including response to measles and rubella outbreak
7. Introduction of new vaccines
8. Vaccine-preventable disease surveillance
9. Data management
10. Immunization supply chain and effective vaccine management
11. Technical advisory body in the Pacific
12. Vaccine safety
13. Communication, advocacy and social mobilization
**TIMETABLE**

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<td>7.1 Regional updates on new vaccine introduction</td>
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<td>3.3 Conclusions and recommendations from SRCC and WPRO TAG</td>
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<td>4. Immunization coverage levels</td>
<td>1610–1640</td>
<td>6.3 Regional strategy and action plan for measles and rubella elimination in the WPR</td>
<td>1600–1630</td>
<td>Feedback to plenary session</td>
<td>1530–1600</td>
<td>11.3 Global and regional updates on vaccine and injection safety</td>
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<td>1620–1635</td>
<td>4.1 Improving immunization coverage in the WPR</td>
<td>1640–1710</td>
<td>6.4 Conclusions and recommendations from SRVC and WPRO TAG</td>
<td>1630–1700</td>
<td>Discussion</td>
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<td>11.4 Vaccine waste management</td>
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<td>4.2 Country experiences</td>
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