30TH MEETING OF THE TECHNICAL ADVISORY GROUP ON IMMUNIZATION AND VACCINE-PREVENTABLE DISEASES IN THE WESTERN PACIFIC REGION

22–25 June 2021
Virtual meeting
30th Meeting of the Technical Advisory Group on Immunization and Vaccine-Preventable Diseases in the Western Pacific Region – 22-25 June 2021 (Virtual)
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MEETING REPORT

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Convened by:
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NOTE

The views expressed in this report are those of the participants of the 30th Meeting of the Technical Advisory Group on Immunization and Vaccine-Preventable Diseases in the Western Pacific Region and do not necessarily reflect the policies of the conveners.

This report has been prepared by the World Health Organization Regional Office for the Western Pacific for Member States in the Region and for those who participated in the 30th Meeting of the Technical Advisory Group on Immunization and Vaccine-Preventable Diseases in the Western Pacific Region from 22 to 25 June 2021.
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Keywords:

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SUMMARY

The 30th Meeting of the Technical Advisory Group (TAG) on Immunization and Vaccine-Preventable Diseases in the Western Pacific Region was held virtually on 22–25 June 2021. The meeting was attended by seven TAG members, four temporary advisers, 51 participants from 21 countries and areas, 89 representatives from partner organizations and World Health Organization (WHO) staff from headquarters, the Regional Office and country offices.

The 30th TAG convened at a time when the coronavirus disease 2019 (COVID-19) pandemic had been seriously affecting immunization programmes as well as disease elimination and eradication initiatives in the Western Pacific, including implementation of the Regional Strategic Framework for Vaccine-preventable Diseases and Immunization in the Western Pacific (2021–2030). Since mid-2020, Member States and WHO in the Region have been urgently taking innovative measures to mitigate the negative impact of the pandemic. In addition, Member States and WHO in the Region have been planning and preparing for the deployment of and immunization with COVID-19 vaccines since October 2020. Several countries in the Region have been carrying out a vaccination response to COVID-19 since February 2021. The TAG meeting was held to support countries and areas in the Region to review these measures, as well as experiences and lessons learnt, and to identify and develop the TAG recommendations.

The meeting participants discussed the experiences and lessons learnt in the roll-out of COVID-19 vaccines in the Region. The TAG urged Member States to strengthen systems for ensuring the safety, quality and efficacy of COVID-19 vaccines, support regional mechanisms for solidarity towards equity of vaccine access, and intensify efforts to accelerate vaccination of high-priority groups and vulnerable, marginalized populations. Discussions centred around the immunization safety monitoring and reporting systems that have been established, particularly to enhance the capacity for early detection and management of adverse events of special interests (AESI) such as thrombosis with thrombocytopenia syndrome (TTS) and myocarditis. The importance of obtaining essential data for evidence-based decision-making was highlighted, and Member States were urged to share up-to-date information and data on vaccine availability, deployment and immunization safety with WHO. The TAG emphasized the need to implement the COVID-19 vaccination through the lens of the Regional Strategic Framework and urged Member States to work with WHO to develop and implement the Western Pacific Regional Road Map for COVID-19 Vaccination Response (2021–2022).

The TAG reiterated the need to ensure that sensitive surveillance of acute fever and rash (AFR) is maintained, and that health intelligence data are used to urgently address residual measles and rubella immunity gaps among vulnerable children and adults. The TAG urged all Member States to ensure that updated national plans of action are available for measles and rubella elimination. The TAG also urged all Member States that use oral poliovirus vaccine (OPV) in their national immunization schedules to proceed with the introduction of the second dose of inactivated poliovirus vaccine (IPV). The TAG reiterated to all Member States, particularly those at high risk, to maintain highly sensitive acute flaccid paralysis (AFP) and environmental surveillance. The TAG urged China and Viet Nam to start the polio containment certification process as soon as possible. Apart from measles and rubella elimination and polio eradication initiatives, the TAG also discussed hepatitis A and rabies control in the Region. The TAG supported the regional goals and strategic directions proposed for hepatitis A control and emphasized the need to provide concerned Member States with technical support to introduce the hepatitis A vaccine, establish sensitive laboratory-supported surveillance and conduct serologic and vaccine-effectiveness studies. The TAG also called on Member States to develop collaborative action plans for rabies control by engaging all relevant stakeholders, particularly to strengthen access to post-exposure prophylaxis and quality-assured vaccines.
1. INTRODUCTION

1.1 Meeting organization

The 30th Meeting of the Technical Advisory Group (TAG) on Immunization and Vaccine-Preventable Diseases in the Western Pacific Region was held virtually on 22–25 June 2021. The meeting was attended by seven TAG members, four temporary advisers, 51 participants from 21 countries and areas, 89 representatives from partner organizations and World Health Organization (WHO) staff from headquarters, the Regional Office and country offices. Annex 1 contains the list of participants.

1.2 Regional overview: background and objectives of the 30th TAG meeting

In October 2020, WHO’s Regional Committee for the Western Pacific endorsed the Regional Strategic Framework for Vaccine-preventable Diseases and Immunization in the Western Pacific (2021–2030). Member States were urged to develop or update national policies, strategies and plans for immunization and vaccine-preventable disease control and elimination, guided by the Regional Strategic Framework. WHO was requested to provide technical support for Member States to develop or update and implement national policies, strategies and plans for immunization and vaccine-preventable disease control and elimination in line with the Regional Strategic Framework (WPR/RC71.R1).

Since 2020, in responding to the COVID-19 pandemic in the Western Pacific Region, WHO has applied strategies of the Regional Strategic Framework to formulate and implement a COVID-19 vaccination response with four WHO strategic pillars: (1) COVID-19 vaccine access and availability, (2) COVID-19 vaccine deployment and immunization, (3) COVID-19 vaccine and immunization safety, and (4) information, monitoring and evaluation for COVID-19 vaccination response. WHO has also used the COVID-19 vaccine roll-out as an opportunity to implement strategies of the Regional Strategic Framework such as life-course vaccination, closing immunity gaps using tailored strategies and emergency preparedness and response.

The objectives of the 30th TAG meeting were:

(1) to determine the epidemiologic nature of vaccine-preventable diseases amid the COVID-19 pandemic and address the impact of the pandemic on immunization programmes and disease elimination initiatives in the Region;

(2) to identify progress and challenges amid the COVID-19 pandemic in implementing the strategies and achieving the goals of the Regional Strategy and Plan of Action for Measles and Rubella Elimination in the Western Pacific and the Regional Strategic Framework for Vaccine-preventable Diseases and Immunization in the Western Pacific (2021–2030); and

(3) to identify, gather and share among countries and partners the experiences and lessons learnt in the deployment and immunization activities of COVID-19 vaccines in the Region.

2. PROCEEDINGS

2.1 Opening session

In his opening remarks, Dr Takeshi Kasai, WHO Regional Director for the Western Pacific, acknowledged that the COVID-19 pandemic requires the health systems to work differently, address the uncertainties and tailor the response to the context. He guided that during the pandemic, when multiple outbreaks happen across the country, the health systems need to be prepared and cannot rely
solely on support from the central level. Vaccines are critical resources required at the same time in multiple countries, and they need to be used in an efficient way to minimize deaths and social destruction. Currently, two doses of COVID-19 vaccines for every health-care worker (HCW) have been secured in 34 of the 37 countries and areas in the Western Pacific Region. He reiterated that since older populations with comorbidities are being targeted for vaccination, the health systems must be strengthened to detect and monitor adverse events.

Dr Kasai guided participants on establishing a long-term vision of the desired future. He reiterated that the COVID-19 pandemic presents an opportunity to expedite the expansion of immunization from childhood programmes to lifelong ones through the implementation of the Regional Strategic Framework.

2.2 Global updates

2.2.1 Immunization Agenda 2030

The Immunization Agenda 2030 (IA2030) sets a unifying vision that is aligned with the Sustainable Development Goals. The focus of IA2030 has been adapted to address the COVID-19 priorities and challenges. Immunization is seen as a global priority. Vaccines have a major role in economic recovery and global security. The focus is on collective action to rebuild essential services and systems and expand immunization programmes using a life-course approach. The various WHO regions have continued the operational planning for immunization during the COVID-19 pandemic with adapted timelines. Member States have been developing their national immunization strategies by incorporating important improvements aimed to strengthen the in-country development process and improve the outcome. The IA2030 was launched in April 2021, followed by targeted engagement during the World Health Assembly. Commitments were echoed by all six WHO regions, Member States, partner organizations, religious leaders, donors and research institutions.

2.2.2 Vaccination response to the COVID-19 pandemic

WHO calls on Member States to prioritize vaccination of all health workers and the most at-risk groups. Vaccine inequity is decreasing, but wide gaps persist between high- and low-income countries. Vaccines are currently having a greater impact on reducing mortality than reducing transmission. Some of the top vaccine-coverage countries are seeing increasing mortality, but multiple factors underly the causes. Updates and guidance were shared for: breakthrough cases; interchangeability with other vaccines; vaccination among children and pregnant or lactating women; vaccine effectiveness and impact studies; COVID-19 vaccine post-introduction evaluation; COVID-19 vaccine explainers; vaccine introduction toolkit; and national deployment and vaccination plan (NDVP).

Renewed goals and strategies are needed to address emerging challenges. A clear understanding is needed of the preconditions, benefits, risks and resources to meet the ambitious vaccination coverage targets. Strategic global guidance is needed by donor institutions that are making major investment decisions, while manufacturers also need enhanced clarity on required supply.

2.3 Vaccination response to the COVID-19 pandemic in the Western Pacific Region

2.3.1 COVID-19 in the Western Pacific Region

Nearly 4 million confirmed cases and 50 000 deaths due to COVID-19 have been reported in the Western Pacific Region. The pandemic has highlighted the importance of investment in public health system preparedness. Preparations at national, subnational and local levels will be imperative to
prevent large-scale community transmission. Effective use of vaccines, appropriate use of nonpharmaceutical interventions and strengthened multisource surveillance systems remain critical activities. The pandemic has demonstrated that countries remain vulnerable to health security threats, regardless of their stage of economic development. The *Asia Pacific Strategy for Emerging Diseases and Public Health Emergencies* (APSED III) is the biregional action framework for implementing the International Health Regulations (IHR 2005) and aims to strengthen core health system functions. There is a need to continue to support Member States in activities aimed at strengthening and advancing capacities for preparedness and response to health security threats.

### 2.3.2 Global and regional updates on access and availability of COVID-19 vaccines

The Access to COVID-19 Technologies Accelerator (ACT-A) continues to be the fastest, most coordinated global platform for developing tools against the COVID-19 pandemic, encompassing the development, regulatory approval and availability of vaccines. The COVAX facility targets to provide 2 billion doses by the end of 2021 for around 20% of populations in each country to cover the high priority groups, while challenges of limited production capacity by manufacturers and non-equitable access among countries exist. Ongoing initiatives with manufacturers, Emergency Use Listing (EUL) mechanisms and vaccine donations are being used to address supply constraints.

Under combined COVAX and bilateral arrangements, the Region now has enough doses to cover all front-line workers and high-priority groups in 22 countries. Pacific island countries and areas (PICs), with their inherent challenges, remain a regional priority for vaccine provision. Efforts continue in the Region for pursuing equitable access through donations and dose-sharing mechanisms, scaling up manufacturing through the establishment of manufacturing nodes and technology sharing, and ensuring regulatory preparedness in countries.

### 2.3.3 Vaccine deployment and vaccination

#### 2.3.3.1 Regional overview of vaccine deployment and vaccination

The main objectives of the presentation were: (1) to update the status of COVID-19 vaccine deployment in terms of vaccination coverage and uptake in priority countries of the Region, particularly the Advance Market Commitment (AMC) countries of the COVAX facility; (2) to present the issues and challenges in COVID-19 vaccine deployment that hinder the COVID-19 vaccination response of Member States; (3) to facilitate and initiate a discussion on proposed action points to be taken by the Member States and WHO secretariat to address issues and challenges in deployment in order to achieve the possible COVID-19 vaccination targets for 2021-2022. In addition, the presentation included a brief overview of the National Deployment and Vaccination Plans (NDVP) development, review and submission process, as well as a summary of the target populations prioritized based on the WHO SAGE Roadmap and identified in the NDVPs of the 14 AMC countries.

#### 2.3.3.2 Vaccine deployment and vaccination in Mongolia

The COVID-19 pandemic has pushed Mongolia to upgrade its immunization programme. As a result of political commitment and support from partner organizations, the Government of Mongolia successfully rolled out COVID-19 vaccines. The country reached 92% first-dose coverage among adults and 80% second-dose coverage. Intersectoral collaboration played a key role in vaccine deployment. The Government of Mongolia received 4.3 million doses through COVAX (AstraZeneca and Pfizer/BioNTech) and donation (Gamaleya and Sinopharm), and an additional 2.5 million doses through bilateral procurement (Pfizer/BioNTech). Despite the high vaccination rate, community transmission remains high. Immunization activities coordinated by the National Expanded Programme on
Immunization, deployment of trained vaccination teams, use of an electronic data management system for immunization and vaccine safety monitoring mechanisms have contributed to the successful roll-out of vaccines. Improved communication strategies are needed to address vaccine hesitancy.

2.3.3.3 Vaccine deployment and vaccination in Viet Nam
Viet Nam has experienced four surges of COVID-19 cases since January 2020, including the ongoing outbreak in industrial zones, hospitals and communities of big cities across the country. The vaccination strategy is based on the priority order of a government resolution, and multiple sectors have been mobilized for the implementation of a mass campaign. The Ministry of Health has also issued technical guidelines for safe vaccination. The Government has proactively sought vaccines through the COVAX arrangement, bilateral agreements and donations. So far, 4.3 million doses have been received out of the 102 million doses committed. Another 50 million doses are under negotiation. Challenges of uncertain shipment schedules and a limited supply of vaccines remain. Only 2.4% of the entire population has received one dose, and 0.1% of the population has received two doses. The country aims to strengthen risk communication to enhance community engagement and conduct a vaccine effectiveness study to address the concern of breakthrough infections.

2.3.4 Vaccine and immunization safety
2.3.4.1 Vaccine and immunization safety in the Republic of Korea
More than 14 million doses of COVID-19 vaccines have been administered as of 12 June 2021. About 46 000 adverse events following immunization (AEFI) have been reported. About 5% are serious AEFI, including anaphylaxis and death. The AEFI reporting rate was as high as 1.8% at the beginning of the vaccine roll-out, but it declined over time.

The Korea Diseases Control and Prevention Agency (KDCA) has enhanced surveillance, particularly for adenoviral vector COVID-19 vaccines, and conducts active surveys when any new COVID-19 vaccine is introduced. In response to serious AEFI, the causality assessment committee was strengthened and an experts subcommittee was formed. As of 16 June 2021, two cases of thrombosis with thrombocytopenia syndrome (TTS) following AstraZeneca vaccination have been confirmed. To be prepared, KDCA developed guidelines on TTS treatment and diagnosis and launched a TTS advisory committee. Also, informational text messages are sent to the adenoviral vector vaccine recipients to raise awareness among the public and health-care professionals.

KDCA shares updated AEFI data three times a week on its website and with the WHO Regional Office on a weekly basis. The government-funded, no-fault Korea Vaccine Injury Compensation Program (KVICP) is also in place.

2.3.4.2 Vaccine and immunization safety in Australia
The safety of the Australian population has always been the highest priority of the Australian state and territory governments. Two key bodies oversee the use of COVID-19 vaccines in Australia: the Therapeutic Goods Administration (TGA) and the Australian Technical Advisory Group on Immunisation (ATAGI). TGA’s vaccine safety monitoring system involves voluntary and legally obligatory reporting and active and passive surveillance. Up to 13 June 2021, the TGA received about 2.5 times more AEFI reports for the AstraZeneca vaccine compared with the Pfizer-BioNTech vaccine. The close monitoring of TTS following immunization informed two significant ATAGI decisions and changed the course of Australia’s vaccine roll-out: Pfizer-BioNTech vaccine was initially preferred over AstraZeneca vaccine for adults under 50 years due to the emergence of TTS, but now Pfizer-BioNTech vaccine is preferred for adults under 60 years due to the higher risk and
observed severity of TTS related to AstraZeneca vaccine in Australian adults 50–59 years compared with international reports and initial estimates.

2.3.4.3 Regional overview on vaccine and immunization safety

Countries and areas in the Western Pacific Region have established a monitoring and reporting system for COVID-19 vaccines and immunization. This includes regulatory monitoring for both pre- and post-authorization to ensure the quality and safety of COVID-19 vaccines. Safety surveillance capacities for COVID-19 vaccines and immunization vary across the Region. Overall, however, countries are managing and responding well to serious adverse events of special interest (AESI), such as anaphylaxis, TTS, myocarditis/pericarditis and death following COVID-19 vaccination.

The main challenges and issues related to COVID-19 vaccine and immunization safety are: (1) newly identified rare serious AESI related to COVID-19 vaccination may negatively impact the COVID-19 vaccine roll-out, including vaccine hesitancy; (ii) limited capacity for clinical management, investigation and causality assessment of AESI (e.g. TTS) in several middle- and low–middle-income countries and PICs, particularly at subnational levels; (3) suboptimal AEFI data management in several countries; and (4) insufficient proactive risk communication for COVID-19 vaccine-specific safety issues (e.g. coincidental deaths among vaccinated adults, etc.). Countries are encouraged to strengthen and expand safety monitoring and reporting to overcome these challenges and issues.

2.3.5 Vaccination response to the COVID-19 pandemic in the Western Pacific Region

Information and data on vaccine availability, deployment and immunization safety are collected and analysed to support decision-making by countries and areas, the WHO Regional Office and country offices. Data are collected from reliable sources, including weekly COVID-19 vaccination and safety updates from 26 countries and areas of the Region, the COVAX facility, government websites, the WHO/UNICEF e-Joint Reporting Form for Immunization and VigiBase. The data are then analysed and shared through dashboards and country/area profiles. Vaccine profiles, vaccine safety profiles and relevant toolkits are also regularly updated and shared to further support countries and areas in planning vaccination activities.

Monitoring vaccine deployment, safety, effectiveness and impact, including the occurrence of infections among people who have been fully vaccinated, remains critical. Vaccination intra-action reviews and post-introduction evaluations may also be done in some countries. A regional vaccination update bulletin will be introduced and issued regularly to countries and partners.

2.4 Measles and rubella elimination in the Western Pacific Region

2.4.1 Experiences and progress of countries in the Region

China

Implementation of comprehensive measles elimination strategies during 2006–2012 substantially reduced measles incidence. However, a resurgence of measles occurred during 2013–2016. With endeavours to implement the international recommendations, measles incidence dramatically decreased in 2017–2020. Confirmed measles cases among persons older than 15 years and infants younger than 8 months accounted for 60% of all cases. Among 3.6–8.3% of confirmed cases that were genotyped, the import-associated genotype D8 or B3 was becoming dominant as compared to the indigenous genotype H1. All surveillance performance indicators satisfied WHO requirements except second-level administrative units reporting a non-measles, non-rubella discard rate of >2 cases per 100 000 population. The outstanding progress is attributed to laboratory-supported surveillance in
identifying vulnerable populations, precise outbreak responses and school-entry vaccination checks to address gaps in population immunity, sustaining >95% coverage with two doses of measles-containing vaccines, and research and evaluation in guiding elimination activities. China will continue efforts towards measles elimination targets and strategies 2021–2023.

Philippines

The National Immunization Program was launched in 1976. The monovalent measles vaccine was introduced in 1982, and the two-dose measles- and rubella-containing vaccine schedule was adopted in 2009. Large immunity gaps caused by suboptimal routine immunization coverage, challenges with vaccine distribution, vaccine hesitancy and the inability to implement supplemental immunization activities (SIAs) regularly resulted in repeated measles resurgences during 2010–2019. The Department of Health successfully implemented a nationwide, preventive measles-rubella SIA in 2020-2021, reaching more than 8.5 million children aged 9 to 59 months with 90% coverage. Careful assessment and planning were done to implement the SIA amid the COVID-19 pandemic, the circulating vaccine-derived poliovirus (cVDPV) outbreak and severe weather events. The Philippines has identified measles and rubella elimination targets and strategies for 2021–2023. It aims to develop the National Strategic Directions 2022–2027 for Routine Immunization programme and enhance vaccine-preventable disease (VPD) surveillance by establishing a network of subnational laboratories in the regions.

2.4.2 Regional update on measles and rubella elimination

2.4.2.1 Expanding measles and rubella laboratory networks in the Philippines and PICs

The COVID-19 pandemic has demonstrated the indispensable role of laboratories in the global health response. The Western Pacific Region continues to maintain a high-quality, WHO-accredited laboratory network for the diagnosis and surveillance of measles and rubella. Laboratory diagnosis and molecular characterization of measles and rubella are central to the Regional Strategic Framework, as part of strategic objectives 2 and 3. The laboratory team at the WHO Regional Office are developing three projects over the coming year: (1) create seven new subnational laboratories in the Philippines; (2) explore the use of rapid antibody tests for IgM measles detection within PICs; and (3) develop/strengthen genotyping for priority countries throughout the Region. The first two projects will improve the timeliness of reporting results for communities that are isolated or difficult to reach, while the third project will provide important epidemiological evidence as each country moves toward measles elimination.

2.4.2.2 Regional overview of measles and rubella elimination in the Western Pacific: evaluating the implementation and impact of the Regional Strategy and Plan of Action

The Western Pacific Region has sustained high overall immunization coverage with measles- and rubella-containing vaccines but intercountry and subnational variability persists. Several countries continued with their efforts to reach missed children, including vulnerable adolescents and adults, through the implementation of SIAs amid the COVID-19 pandemic. Case-based surveillance meets sensitivity targets at the national level, but only 28% of the second-level administrative units met the target for reporting discarded non-measles, non-rubella cases. Eight countries and areas have achieved measles elimination, and six countries and areas have achieved rubella elimination. Substantial progress has been made towards the achievement of operational targets for 2020 set by the Regional Strategy and Plan of Action for Measles and Rubella Elimination. Together, the Regional Strategic Framework and the Regional Strategy and Plan of Action will continue to guide progress towards the achievement of measles and rubella elimination in the Region.
2.4.3 Global update on measles and rubella elimination
The COVID-19 pandemic has had a huge impact on routine immunization coverage and SIAs, leaving millions of vulnerable children unvaccinated. These disruptions, along with surveillance and laboratory testing challenges, are impeding outbreak preparedness, prevention and response. Nevertheless, countries continue to drive the measles and rubella elimination agenda. As of 2021, 81 countries (42%) have achieved measles elimination, and 93 (48%) have achieved rubella elimination. The *Measles and Rubella Strategic Framework 2021–2030* aims to achieve regional measles and rubella elimination goals. It is aligned with the strategic priorities and core principles of IAI2030. The *Measles Outbreaks Strategic Response Plan 2021–2023* has been developed to ensure effective prevention of, preparedness for, response to and recovery from a measles outbreak. It includes six priority countries from the Western Pacific Region. Globally, there is a need to act urgently in high-risk countries to prevent and mitigate the impact of a measles outbreak during the COVID-19 pandemic.

2.4.4 Conclusions and recommendations from the Ninth Annual Meeting of the Regional Verification Commission for Measles and Rubella Elimination in the Western Pacific
During the 2019-2020 period, several countries and areas in the Region experienced an increased burden of morbidity and mortality due to large outbreaks of measles and rubella. The COVID-19 pandemic has placed significant strain on public health programmes, but countries continue with their efforts to achieve/sustain measles and rubella elimination. Eight countries and areas were verified to have sustained measles elimination, and six countries and areas were verified as having achieved rubella elimination. The Regional Verification Committee gave recommendations for individual countries and for the Pacific subregion to address the challenges of: immunity gaps among underserved subpopulations and persistent poor immunization coverage in some countries; importation-related outbreaks in countries that have achieved elimination or have very low incidence of disease; outbreaks among susceptible adolescents and adults; hospitals acting as sources of infection spread; suboptimal performance of AFR surveillance, particularly at subnational levels; and breakthrough infection among vaccinated individuals.

2.5 Response to, prevention of and preparedness for emergence and circulation of vaccine-derived poliovirus (VDPV)

2.5.1 Update on Global Polio Eradication Initiative
Globally, the number of polio cases in the first six months of 2021 significantly decreased compared to the previous 12 months, with just two cases of wild poliovirus in Afghanistan and Pakistan and 134 cVDPV (type 1, 2 and 3) cases. The roll-out of novel oral poliovirus vaccine type 2 (nOPV2) under an Emergency Use Listing (EUL) continues. Thirty-two countries have submitted documents confirming their readiness to use nOPV2 across three WHO regions: African, Eastern Mediterranean and European. Insufficient progress towards polio eradication has triggered a revision of the current strategy. The new strategy seeks to drive a shift in two main ways across both endemic and outbreak countries and comprises two goals: (1) interrupt wild poliovirus transmission in endemic countries; and (2) stop cVDPV transmission and prevent outbreaks in non-endemic countries. Another key focus area of the new strategy includes aligning the gender equality strategy with the eradication strategy and further strengthening partnership, performance and accountability.
2.5.2 cVDPV in the Western Pacific Region

2.5.2.1 Update of cVDPV outbreaks (type 1 and type 2)

Malaysia

In December 2019, Malaysia reported poliovirus outbreaks due to concurrent circulating vaccine-derived poliovirus type 1 (cVDPV1) and type 2 (cVDPV2), which were genetically linked to polioviruses circulating in the Philippines at that time. The enabling factors for the outbreak included limited mucosal immunity among children born since 2008; pockets of zero-dose children due to low vaccination uptake, especially among non-citizens in high-risk areas in Sabah state; high population movement (Sabah/Philippines and Sabah/Labuan); areas with suboptimal AFP surveillance; and low coverage of environmental surveillance. An outbreak response was rapidly initiated by the national health authorities and supported by the Global Polio Eradication Initiative (GPEI). The response included multiple vaccination rounds with bivalent oral poliovirus vaccine (bOPV) and monovalent oral polio vaccine type 2 (mOPV2); and enhancement of AFP and environmental surveillance. The COVID-19 pandemic greatly affected response activities, resulting in postponed vaccination rounds and interrupted performance of AFP and environmental surveillance. The Ministry of Health is currently preparing the final report to be submitted to WHO for consideration of closing the polio outbreak in Malaysia.

Philippines

On 19 September 2019, the Department of Health declared a polio outbreak in the Philippines. As of 31 March 2021, 28 children were infected with VDPV1 and VDPV2. To interrupt circulation of polioviruses, the Department of Health led multiple rounds of intensive SIAs with both bOPV and mOPV2. The Department of Health has made tremendous efforts to enhance AFP surveillance by addressing current obstacles, including insufficient human resources on the ground, gaps in understanding a syndromic concept of AFP in hospitals and insufficient capacity of public health surveillance teams at local levels. The COVID-19 pandemic significantly impacted outbreak response, resulting in postponed rounds of polio vaccination, interrupted routine immunization services, compromised surveillance and complicated preparation for a nationwide measles–rubella–polio vaccination campaign. In May 2021, WHO officially closed the polio outbreak in the Philippines. The Department of Health is now defining the road maps and paths towards building a strong, sustainable and resilient immunization system backed by strong routine immunization and surveillance programmes.

2.5.2.2 Post mOPV2-SIA VDPV2 in the Philippines

The use of mOPV2 during the cVDPV2 outbreak response in the Philippines led to the emergence of ambiguous type 2 vaccine-derived polioviruses (aVDPV2) that were detected in human and environmental samples 30 to 120 days after the mOPV2 SIA. The 10 newly emergent VDPV2 had six to 13 nucleotide changes from the type 2 Sabin strain and were not genetically linked to other known VDPV2 isolates. A risk model was developed to assess the risk of possible circulation of VDPV2 utilizing different parameters. A sensitivity analysis was also conducted. Within the National Capital Region (NCR), all the areas with aVDPV2 detections were considered high risk, while 88% of all cities in NCR were moderate to high risk. All four provinces bordering NCR were high risk, including the three provinces of Region 4A that conducted mOPV2 SIAs. The risk model was applied to different scenarios to guide the development of an outbreak preparedness and response plan to cVDPV2 and determine the most suitable vaccination intervention, including whether to use mOPV2.
or nOPV2 or IPV. Details on the different scenarios and proposed interventions were included in the presentation.

2.5.2.3 Prevention of and preparedness for cVDPV in the Western Pacific

The Western Pacific Region was certified as free from indigenous wild poliovirus in 2000. Since then, only one outbreak due to imported type 1 wild poliovirus occurred in 2011. However, outbreaks of cVDPVs have been occurring since 2001, and since 2015, their frequency has significantly increased along with the increasing divergence of the VDPVs due to prolonged undetected circulation. The Regional Strategic Framework for Vaccine-preventable Diseases and Immunization in the Western Pacific (2021–2030) defines the polio-related goal, target and strategic directions. The Region maintains high coverage with routine polio vaccines and high-quality AFP surveillance. The Region is moving towards OPV cessation, with OPV-using countries introducing a second dose of IPV into the routine immunization schedule. Recent outbreaks of cVDPV1 and cVDPV2 in the Region have been closed. A high-quality, WHO-coordinated regional polio laboratory network with accredited laboratories and an established quality management system is contributing to outbreak preparedness and response with timely detection and characterization of polioviruses.

2.6 Implementation of the Regional Strategic Framework for Vaccine-preventable Diseases and Immunization in the Western Pacific (2021–2030)

2.6.1 Country experiences

Lao People’s Democratic Republic

The Reproductive, Maternal, Newborn, Child and Adolescent Health (RMNCAH) Strategy 2021–2025 aims to have an integrated approach for service provision, focusing on the needs of the mother and child during the course of their lives, including routine immunization and nutritional and early childhood development assessments. The goal is to reduce missed opportunities observed when the service provision is delivered as separate visits under different programmes. The AEFI surveillance system will be strengthened by implementing the new National AEFI Surveillance and Management Guidelines. Efforts have been made to promote vaccine confidence and demand, including focused activities for the Hmong community. Data from the Health Information Management system were used to assess the impact of the COVID-19 pandemic. Four rounds of periodic intensification of routine immunization were implemented in high-risk districts in late 2020, and tailored strategies are being drawn up to vaccinate priority groups and reach hard-to-reach communities.

Cambodia

The National Immunization Program Strategic Plan 2016–2020 contributed significantly to performance improvements in strategic priority areas, including service delivery, disease surveillance and management capacities. The National Immunization Strategic Plan 2021–2025 will focus on system strengthening for the management of the pandemic and outbreaks, reaching the unreached populations for routine immunization, promoting vaccine confidence and demand, improving vaccine and immunization safety, and effective use of the health intelligence for improved management of the immunization program. All strategies for priority areas of work are in line with the Regional Strategic Framework and the National Health Strategic Plan 2021–2030.
2.6.2 New VPDs for accelerated control towards 2030

Hepatitis A

It is difficult to estimate the global burden of hepatitis A due to a lack of robust and reliable surveillance systems and seroprevalence studies in different age groups. In 2017, it was estimated that 170 million cases and 18,642 deaths due to hepatitis A occurred globally. Between 2000 and 2020, outbreaks of hepatitis A were reported in several countries of the Western Pacific Region. Only seven countries in the Region have hepatitis A vaccine in their routine immunization schedule. Countries in the Western Pacific Region have shown shifting patterns in hepatitis A virus antibody positivity since 2000, along with shifts in vulnerable populations. The key factors contributing to these shifts are improvements in socioeconomic and living conditions and better vaccination coverage among children. The Regional Strategic Framework for Vaccine-preventable Diseases and Immunization for the Western Pacific (2021–2030) defines the hepatitis A-related goal, target and strategic directions. To ensure progress towards the set goal, in December 2020, the WHO Regional Office for the Western Pacific organized a regional expert consultation on viral hepatitis elimination. The key recommendations from the consultation and priorities for the next decade include conducting an epidemiologic analysis of the status and recent trends of viral hepatitis A in the Region, initiating/strengthening surveillance for hepatitis A and introducing hepatitis A vaccines into national immunization schedules.

Rabies

In the Region, eight countries remain endemic for dog-mediated rabies, and annually, more than 800 people die of rabies despite more than 19 million people receiving post-exposure prophylaxis (PEP). Most countries have a national multi-year strategic plan for rabies control and prevention, half of which are endorsed by the health and agricultural ministries. In the health ministries, responsibility for rabies falls under the communicable disease or zoonoses division, and the role of national immunization programmes is limited to vaccine storage and cold chain. The remaining challenges in the Region include: majority of human rabies cases occur in resource-limited settings where awareness and access to PEP are limited; global shortage of quality-assured and affordable vaccines and immunoglobulin, slow vaccine procurement and poor quality control system; suboptimal surveillance affecting timely data reporting and sharing between human and animal health sectors delaying rapid response; persistent lack of national commitment; and limited resources and capacity to prioritize primary prevention of rabies.

2.6.3 Proposed regional road map for COVID-19 vaccination response in the Western Pacific 2021-2022

Since early March 2021, many countries and areas of the Region have made significant progress in COVID-19 vaccine roll-out and vaccination coverage. For example: (1) most countries and areas of the Region achieved >20% coverage with at least one dose among HCWs; (2) most PICs achieved >60% coverage with at least one dose among elderly people; (3) most non-PICs achieved >15% coverage with at least one dose among elderly people; (4) most PICs achieved >20% coverage with at least one dose for the entire eligible population; and (5) many non-PICs achieved >10% coverage with at least one dose for the entire eligible population. Several Member States, such as Cambodia and the Lao People’s Democratic Republic, have used the COVID-19 vaccination response as an opportunity to implement strategies of the Regional Strategic Framework.

Based on this progress and achievements, WHO has proposed a Western Pacific Regional Road Map for COVID-19 Vaccination Response (2021–2022) to achieve sustainable reduction of (1) mortality and
morbidity due to COVID-19 among HCWs and elderly people; (2) mortality and morbidity due to COVID-19 among other high-risk populations; (3) burden on health-care systems due to COVID-19; (4) the number of symptomatic COVID-19 cases among the entire population; and (5) the number of severe diseases and deaths due to COVID-19 among the entire population.

To achieve these targets, the Regional Road Map is proposing Member States to (1) achieve >90% vaccination coverage with all recommended doses for HCWs; (2) accelerate vaccination for elderly people and achieve >90% vaccination coverage with all recommended doses for elderly people; (3) expand and accelerate vaccination for other high-risk populations (e.g. individuals with comorbidities), high-risk employment groups (e.g. factory, construction, mining, dormitory) and high-risk sociodemographic groups (e.g. urban slum dwellers), with consideration of country-specific situation; and (4) achieve >40% vaccination coverage with at least one dose for the entire eligible population in non-PICs and >90% in PICs.

2.7 Working with partners

The Asian Liver Center at Stanford University aims to eliminate hepatitis B and reduce the burden of liver cancer. Its project in Viet Nam focused on strengthening the capacity of the health-care system in birth-dose vaccination and prevention of mother-to-child transmission of hepatitis B through funding and training support. Initially, the project was implemented in five provinces with low hepatitis B birth-dose coverage. It will be expanded to cover three additional provinces in July 2021. Technical and funding support was also provided to research and identify training gaps in hepatitis B control and prevention among Viet Nam medical school programmes. The Asian Liver Center at Peking University collaborated with the Chinese Centers for Disease Control and Prevention (China CDC) in designing posters for World Immunization Week 2021 and COVID-19 vaccination.

Gavi, the Vaccine Alliance is co-leading COVAX, the vaccine pillar of ACT-A. It is providing support to low-income countries through the Advance Market Commitment (AMC) mechanism, enabling the availability of subsidized COVID-19 vaccines covering 20% of each country’s requirement. The COVID-19 vaccine procurement for self-financing participants (SFPs), humanitarian buffer, no-fault compensation and dose sharing are other areas of support. So far, 13 AMC participants in the Western Pacific Region have received nearly 9 million doses of COVID-19 vaccines (1.8% of the population), and seven SFPs have received 4 million doses (0.7% of the population). Gavi also continues with the traditional support of new and underutilized vaccines, emergency outbreak support, and financial support for health systems and immunization strengthening. The Gavi’s 2021–2025 strategy (Gavi 5.0) aims to “leave no-one behind with immunisation” and has the mission to save lives and protect people’s health by increasing the equitable and sustainable use of vaccines.

The National Center for Global Health and Medicine (NCGM, Japan) provides international expert services, trainings and seroprevalence survey research in various countries. To inform immunization policy recommendations, NCGM carried out an HBsAg prevalence survey in four provinces of Viet Nam, an anti-MR IgG seroprevalence survey in the Lao People’s Democratic Republic in May 2019, and a similar seroprevalence survey in the East Sepik province of Papua New Guinea in February 2020.

The National Centre for Immunization Research and Surveillance (NCIRS, Australia) has served as the independent technical specialists on immunization and vaccines for Australia for 24 years. In recent years, they have expanded their role to include global health, partnering with other international stakeholders. The Australian Regional Immunization Alliance (ARIA) works
collaboratively with governments and global immunization partners to strengthen and expand immunization in the Western Pacific Region. They have contributed through the completion of various projects, including new vaccines’ introduction, generating evidence on vaccine service delivery enablers and barriers, sero-surveillance, and development of EPI training and measles-rubella guidelines. As part of a shared recovery of the Region from the pandemic, the Australian Government is committed to supporting access to safe and effective COVID-19 vaccines for the Pacific and South-East Asia. Further, the Regional COVID-19 Vaccine Access and Health Security Initiative (VAHSI) is supporting vaccine access and providing access to Australian and global technical expertise.

PATH contributed to strengthening the Japanese encephalitis (JE) vaccination programmes in the Lao People’s Democratic Republic and Cambodia. In the Lao People’s Democratic Republic, PATH supported the training of health staff, donation of JE vaccines, implementation of JE catch-up campaigns, updating of training curriculum on immunization, and activities to increase JE vaccination demand in the community. In Viet Nam, PATH supported the development of COVID-19 vaccine; the pre-clinical studies have been completed and phase II clinical trials are under way. They also supported the deployment of COVID-19 vaccine and the training of the health staff at provincial, district and local levels in Gia Lai province.

Rotary International highlighted the need to ensure that polio eradication remains a top priority globally for all partners under the Global Polio Eradication Initiative. The Rotarians are contributing through celebrity endorsements, raising funds and arranging advocacy campaigns. They have contributed to the COVID-19 pandemic response by arranging fund-raising activities, enhancing community awareness and providing personal protective equipment.

The Centers for Disease Control and Prevention (CDC) *Global Immunization Strategic Framework 2021–2030* aligns with the global vision defined in the IA2030. It identifies CDC’s role in strengthening the capacity and performance of immunization programmes at global, regional and country levels within a global ecosystem of partnerships. For the maintenance of polio eradication in the Western Pacific Region, CDC supported the outbreak response management of the cVDPV1 and cVDPV2 outbreaks in the Philippines and Malaysia and the improvement of the reverse cold chain system in Papua New Guinea. CDC provided technical assistance for the implementation of the measles-rubella bOPV SIA in the Philippines, the planning of research studies around serosurveys, a case-control study following a measles outbreak in Tonga, documenting evidence around the use of combined measles-rubella vaccines, finalizing and publishing the regional guidelines on the surveillance of CRS, and preparing the meeting report from the 9th RVC on Measles and Rubella Elimination. For hepatitis B control in the Region, CDC participated in the expert consultation on hepatitis elimination, contributed to the development of the hepatitis B section of the Regional Strategic Framework, and supported the implementation and evaluation of interventions to improve hepatitis B birth-dose coverage in Viet Nam. Overall, CDC has provided support for strengthening routine immunization systems, regionalization of the STOP team and deployment of personnel in priority countries and at the regional level.
3. CONCLUSIONS AND RECOMMENDATIONS

3.1 Conclusions

COVID-19 vaccine access and availability

The TAG:

- Notes with alarm the global shortage of COVID-19 vaccines, delays and continued uncertainties on the release of supply from manufacturers, both for COVAX and other supply channels.
- Congratulates the Secretariat and 35 Member States for ensuring access and availability of COVID-19 vaccines for priority populations.
- Commends the Secretariat for steadily strengthening national regulatory systems over the past year including regulatory preparedness for public health emergencies, which enabled countries across the Region to access COVID-19 vaccines.
- Commends WHO and Member States for strengthening the Regional Alliance of National Regulatory Authorities, which has provided a reliable mechanism for information sharing and cooperation across Member States to facilitate COVID-19 vaccine authorization and post-marketing surveillance.
- Appreciates WHO and partner efforts to support rapid vaccine research and development, undertake regulatory assessments through the Emergency Use Listing (EUL) process, collaborate with national regulatory authorities (NRAs) to ensure the safety, efficacy and quality of COVID-19 vaccines, mobilize strategies to increase vaccine supply such as donations through COVAX and bilateral agreements, and initiate mechanisms for transfer of technologies to scale up production.
- Notes that Member States need to continue to access and make available sufficient doses to vaccinate the next set of priority populations and eventually deploy COVID-19 vaccines to the general population to enable countries to reduce the impact of the pandemic on their societies and economies.
- Notes with concern the challenges faced by COVAX in delivering committed doses, due in part to challenges in scaling up global production capacity for COVID-19 vaccines.
- Is greatly concerned with the inequity of vaccine access and availability with more than 80% of the COVID-19 vaccines that have been produced supplied to high-income countries, resulting in wide inequity with low- and middle-income countries.
- Notes the following issues and challenges:
  - COVAX is not yet, in this Region, able to fulfil its role to broker collaboration and solidarity across countries to overcome inequitable access to COVID-19 vaccines.
  - The regulatory landscape of COVID-19 vaccines is complex due to variations in manufacturing sites from those approved under EUL and variations in shelf life. These complex processes present challenges to countries, especially in the context of donations announced on a short timeline and vaccines with a short shelf life.
  - Bottlenecks in the value chain (raw materials for filling and packaging) are impacting the global COVID-19 vaccine supply.
  - The risk of substandard and falsified COVID-19 vaccines is high, especially in the context of high demand with a constrained supply. Substandard and falsified products will cause direct harm, generate vaccine hesitancy and reduce public trust in COVID-19 vaccination.
COVID-19 vaccine deployment and immunization

The TAG:

- Congratulates Member States for successfully developing and submitting national deployment and vaccination plans (NDVPs) to COVAX.
- Acknowledges that:
  - 34 out of 37 countries and areas of the Region have initiated COVID-19 vaccination activities;
  - The vaccine utilization rate (number of doses administered as a percentage of doses available in the country) has reached >50% in 17 countries and areas: 10 non-Pacific island countries and areas (PICs) (Australia, Brunei Darussalam, Cambodia, Hong Kong SAR (China), Lao People’s Democratic Republic, Malaysia, Mongolia, New Zealand, Philippines and Viet Nam) and seven PICs (American Samoa, Federated States of Micronesia, French Polynesia, Marshall Islands, Nauru, Samoa and Tonga);
  - countries have largely prioritized high-risk groups according to the Strategic Advisory Group of Experts (SAGE) on Immunization guidance in the WHO SAGE Roadmap for Prioritizing Uses of COVID-19 Vaccines in the Context of Limited Supply, including prioritizing front-line health-care workers (HCWs), older adults and persons with comorbidities;
  - at least 80% of HCWs have been vaccinated with at least one dose in nine countries and areas: six non-PICs (Cambodia, Japan, Malaysia, Mongolia, Philippines and Viet Nam) and three PICs (Nauru, Commonwealth of the Northern Mariana Islands and Tonga); and
  - Mongolia has vaccinated 98% of the older adult population with at least one dose; the US-Affiliated Pacific Islands (Palau, Guam and American Samoa), a French territory (Wallis and Futuna) and Nauru have 100% coverage with at least one dose among their older adult populations.
- Agrees that the strategies in the Regional Strategic Framework for “expanding immunization services along the life course” and “closing immunity gaps through tailor-made immunization strategies” support Member States of the Region to accelerate COVID-19 vaccine deployment and immunization.
- Notes the following issues and challenges:
  - An overriding constraint is the short, uncertain supply of vaccines as discussed above.
  - Vaccination coverage with at least one dose is less than 10% of the entire population in most countries in the Region.
  - Vaccination coverage among older adults is about 22% in most countries in the Region.
  - Vaccination coverage among HCWs in Papua New Guinea is still around 15%.
  - Although countries have prioritized persons with comorbidities, some are challenged with defining the target number and monitoring coverage.
  - The safety of newly developed vaccines is a concern among the general population in some countries (e.g. Lao People’s Democratic Republic and Viet Nam).
  - Vaccine hesitancy among HCWs and vaccine brand preference among the general population are present (e.g. Papua New Guinea, Philippines and Brunei Darussalam).
  - Vaccination sites have been limited to designated health facilities and hospital settings in the initial stages (e.g. Cambodia, Lao People’s Democratic Republic, Papua New Guinea and Philippines) and distribution of vaccines to local government units have been delayed in some countries (e.g. Philippines).
  - Human resources available for vaccination activities are limited due to mobilization of staff for COVID-19 outbreak response, quarantine for COVID-19 infection (e.g. Philippines) and provincial lockdowns impeding training roll-out (e.g. Lao People’s Democratic Republic).
Inadequate electronic reporting systems have resulted in data gaps, such as uncertain
master-listing of priority target populations and lack of disaggregated data by target
group and vaccination site (e.g. Philippines, Cambodia and Viet Nam).
The occurrence of SARS-CoV-2 infections in those who have been fully vaccinated,
as observed in Mongolia and Viet Nam, is expected since vaccine protection is less
than 100%.

COVID-19 vaccine and immunization safety

The TAG:

- Notes that Member States of the Region have established functional immunization safety
  monitoring and reporting systems for COVID-19 vaccination.
- Acknowledges that anaphylaxis has been well managed by Member States of the Region.
- Acknowledges that adverse events of special interest (AESI), particularly anaphylaxis and
  thrombosis with thrombocytopenia syndrome (TTS), are generally well monitored in the
  Region.
- Appreciates Australia and the Republic of Korea for sharing valuable experiences and lessons
  learnt in managing serious adverse events following immunization (AEFI), including TTS.
- Acknowledges the efforts of WHO to assess country capacity for immunization safety
  monitoring and response, support countries to build capacity for AEFI surveillance and
  causality assessment, and collect, analyse and share data on serious AEFI and AESI to
  support countries’ decision-making processes for COVID-19 vaccination.
- Acknowledges the efforts of Member States, WHO and other partners to manage and respond
  to serious AEFI without interruption of the COVID-19 vaccine roll-out.
- Notes that the strategies in the Regional Strategic Framework for vaccine safety and safe
  immunization, vaccine confidence, acceptance and demand, and preparedness for and
  response to a safety event related to vaccines or immunization programmes have supported
  Member States of the Region to effectively address vaccine and immunization safety issues
  during the COVID-19 vaccine response.
- Notes with concern the following challenges for ensuring COVID-19 vaccine and
  immunization safety:
  - newly identified, rare, serious AESI related to COVID-19 vaccination, which could
    have a significant impact on COVID-19 vaccination programmes (e.g. increased
    concerns about vaccine safety, vaccine hesitancy or programme suspension);
  - limited capacity for early detection, clinical management, investigation and causality
    assessment of AESI (e.g. TTS) in several middle-income and lower–middle-income
    countries and PICs, particularly at subnational levels;
  - suboptimal AEFI data management in several countries; and
  - insufficient proactive risk communication for safety concerns that have arisen with
    COVID-19 vaccination (coincidental deaths among vaccinated adults, myocarditis,
    TTS, etc.).

Information, monitoring and evaluation for COVID-19 vaccination response

The TAG:

- Commends collaboration between Member States and WHO to collect data on vaccine
  availability, vaccine deployment and immunization safety through the Weekly COVID-19
  Vaccination and Safety Update, and to share these data and other sources as part of COVID
  19 vaccination country/area profiles.
- Acknowledges the challenges faced by Member States in obtaining essential data for
  evidence-based decision-making and planning of COVID-19 vaccination, including reliable
information on vaccine availability and epidemiological data on COVID-19 infection, transmission and virus variants.

- Recognizes the importance for WHO and Member States to monitor COVID-19 vaccine deployment, safety and impact, including the occurrence of infections among people who have been fully vaccinated.

Measles and rubella elimination in the Western Pacific Region

The TAG:

- Commends Member States of the Western Pacific Region for making substantial progress towards achieving the 2020 operational targets set by the Regional Strategy and Plan of Action for Measles and Rubella Elimination in the Western Pacific, endorsed by the WHO Regional Committee in October 2017:
  - Several countries and areas of the Region (e.g. Hong Kong SAR (China), Macao SAR (China), Republic of Korea and Singapore) were able to prevent large-scale, prolonged measles outbreaks despite a high burden of measles virus importation during the recent global resurgence because of sustained high two-dose measles–rubella vaccine coverage, high-quality surveillance and outbreak response.
  - China has sustained decreased measles transmission since 2016 and made great progress towards measles elimination, as demonstrated by the absence of measles H1 genotype detection in China since 2020.
  - National action plans for measles and rubella elimination are available for 12 out of 16 non-PIC countries and areas and for the Pacific subregion.
  - The number of countries reporting rubella surveillance and laboratory data increased from 29 (81%) in 2019 to 34 (94%) in 2020.
  - Nationwide congenital rubella syndrome (CRS) surveillance has been established in seven countries (representing 13.1% of the regional population) and sentinel CRS surveillance in an additional five countries (representing 6.3% of the regional population).
  - In 2020, the Philippines began establishing a national vaccine-preventable disease laboratory network with seven subnational measles and rubella laboratories.
  - In 2021, eight countries and areas of the Region were verified to have achieved and sustained measles elimination: Australia, Brunei Darussalam, Hong Kong (China), Japan, Macao SAR (China), New Zealand, Republic of Korea and Singapore.
  - In 2021, six countries and areas of the Region were verified to have achieved and sustained rubella elimination: Australia, Brunei Darussalam, Hong Kong SAR (China), Macao SAR (China), New Zealand and Republic of Korea.
- Supports the goals, targets set and strategic directions proposed for measles and rubella in the Regional Strategic Framework for Vaccine-preventable Diseases and Immunization in the Western Pacific (2021–2030), endorsed by the WHO Regional Committee in October 2020.
- Congratulates the Philippines for implementing a safe and successful nationwide preventive measles–rubella supplementary immunization activity (SIA) in 2020-2021 during the COVID-19 pandemic.
- Congratulates Hong Kong SAR (China) on being verified to have achieved rubella elimination.
- Commends the significant efforts that have been made by Member States to sustain immunization services and activities during the ongoing COVID-19 pandemic.
- Commends Papua New Guinea and WHO for establishing a national measles–rubella vaccine stockpile as preparedness for a measles outbreak, which is likely due to large immunity gaps in the country.
- Notes that as of the end of 2020, five countries and areas of the Region have not yet achieved rubella elimination or proposed or established a national target date for rubella elimination:
Hong Kong SAR (China), Japan, Lao People’s Democratic Republic, Mongolia and Viet Nam.

- Notes with great concern that measles (and rubella) immunity gaps have increased during the pandemic in many countries, posing a threat of large measles (and rubella) outbreaks once COVID-19-related control restrictions are eased and international travel resumes.

- Notes with serious concern the following issues and challenges:
  - Widespread immunity gaps exist in some countries due to chronically poor-performing routine immunization programmes, requiring repeated SIAs;
  - Remaining or growing measles and/or rubella immunity gaps among adolescents and young adults, with increasing occurrence of measles among adults, put young infants at risk of infection and severe disease;
  - Measles susceptibility, particularly in outbreak settings, among infants below the age of vaccination eligibility;
  - Persistent immunity gaps among specific high-risk subpopulations (i.e. underserved minorities, remote areas, and cross-border, stateless and migrant communities);
  - Continued occurrence of transmission of measles infection within health-care facilities;
  - Inadequate measles and rubella surveillance, particularly at subnational levels of several countries and areas, affecting countries’ ability to detect and respond to outbreaks in a timely fashion;
  - Lack of serologic testing capability in some isolated, difficult-to-reach communities within PICs;
  - Insufficient capability to perform appropriate genotyping and analysis of data in certain priority countries;
  - Inadequate preparedness and capacity to prevent and respond to measles outbreaks in some countries; and
  - Significant pressure on countries that have achieved elimination but remain vulnerable to importations leading to outbreaks.

**Poliomyelitis (polio) eradication in the Western Pacific Region**

The TAG:

- Commends the efforts of the Member States to maintain polio-essential functions during the COVID-19 pandemic.
- Congratulates the Philippines on the official closing of the circulating vaccine-derived poliovirus (cVDPV) type 1 and type 2 outbreaks detected in 2019.
- Supports the regional goal, target set and strategic directions proposed for polio in the Regional Strategic Framework for Vaccine-preventable Diseases and Immunization in the Western Pacific (2021–2030),
- Notes the following:
  - The plans of countries using oral poliovirus vaccine (OPV) to introduce the second dose of inactivated polio vaccine (IPV) in their routine immunization schedules starting from 2021;
  - The response to “young” vaccine-derived poliovirus type 2 (VDPV2), reflecting enhanced surveillance, and the opportunities offered by a mix of virology and risk modelling for a more targeted and rapid outbreak response; and
  - The availability of EUL for novel oral poliovirus vaccine (nOPV) type 2, its deployment in western Africa and potential relevance to future outbreaks in the Western Pacific Region.
- Notes with concern the repeated emergence of VDPV2 in the Philippines following the use of monovalent oral poliovirus vaccine type 2 (mOPV2) in response to a cVDPV2 outbreak, and the emergence of VDPV3 in China.
- Notes the following issues and challenges:
VDPVs may continue emerging in the Region, particularly in areas with suboptimal vaccine coverage and poor hygiene, sanitation and access to safe drinking water, representing a risk for further circulation and outbreaks.

- Environmental surveillance to monitor the presence and circulation of polioviruses is not yet sufficient in some countries.
- National inventories to identify poliovirus potentially infectious materials (PIM) have not been completed in the Region.
- The certification process for laboratory containment has not yet commenced in China and Viet Nam.

**Hepatitis A control in the Western Pacific Region**

The TAG:

- Supports the regional goal, target set and strategic directions proposed for hepatitis A in the *Regional Strategic Framework for Vaccine-preventable Diseases and Immunization in the Western Pacific (2021–2030)*.
- Recognizes the following:
  - Hepatitis A incidence and serologic data, which are indispensable for hepatitis A risk assessment, are not widely available from countries and areas of the Region.
  - Hepatitis A outbreaks associated with consumption of contaminated foods have been reported since 2000 in Australia, China, New Caledonia and the Republic of Korea.
  - Hepatitis A vaccination has been included in national or subnational immunization programmes in Australia, China, Mongolia and the Republic of Korea, leading to significant decreases in incidence rates.
  - In countries where hepatitis A remains a burden, inclusion of hepatitis A vaccine in national immunization programmes may help prevent outbreaks and decrease incidence.
  - Hepatitis A may be transmitted through contaminated food or water or through sexual transmission, so a multifaceted approach including collaboration across health programmes and with other sectors is required to achieve hepatitis A control.
- Notes the following issues and challenges:
  - poor understanding of the burden of hepatitis A in countries and areas of the Region that have not introduced the vaccine;
  - changing epidemiology of hepatitis A in the Region;
  - insufficient national capacity for hepatitis A surveillance; and
  - lack of effective strategies to reach adolescents and adults with preventive vaccination.

**Rabies control in the Western Pacific Region**

The TAG:

- Notes the following:
  - Eight countries in the Western Pacific Region remain classified as endemic for dog-mediated rabies: Cambodia, China, Lao People’s Democratic Republic, Malaysia, Mongolia, Republic of Korea, Philippines and Viet Nam.
  - Based on the annual rabies data submitted by countries, more than 800 people die of rabies annually in the Western Pacific Region and more than 19 million people receive post-exposure prophylaxis every year.
In 2018, the WHO Regional Committee for the Western Pacific endorsed the *Regional Action Framework for Control and Elimination of Neglected Tropical Diseases in the Western Pacific*, which includes elimination of rabies as one of the targeted goals. In 2021, the World Health Assembly endorsed *Ending the Neglect to Attain the Sustainable Development Goals: A Road Map for Neglected Tropical Diseases 2021–2030*. Both strategic documents include zero human deaths from rabies as a targeted goal by 2030.

- Supports the regional goal and target set and strategic directions proposed for rabies by the *Regional Strategic Framework for Vaccine-preventable Diseases and Immunization in the Western Pacific (2021–2030)*,
- Notes the following challenges to rabies control in endemic countries of the Region:
  - occurrence of approximately 80% of human cases of rabies in resource-limited, rural communities where awareness among the public and health professionals and access to appropriate post-exposure prophylaxis are limited or non-existent;
  - global and local shortages of quality-assured, affordable human rabies vaccines and immunoglobulin, a slow procurement system, and a poor vaccine quality control system, leading to the presence of counterfeit vaccines;
  - absence of a functioning surveillance system to enable timely data reporting and sharing between human and animal health sectors to trigger rapid response (e.g. dog bite registries);
  - persistent lack of national commitment, resources and capacity to prioritize rabies and improve dog vaccination coverage to prevent disease at its main source; and
  - current role of national immunization programmes limited to vaccine storage and cold chain maintenance.

**Western Pacific Regional Road Map for COVID-19 Vaccination Response (2021–2022) in line with the Regional Strategic Framework for Vaccine-Preventable Diseases and Immunization in the Western Pacific (2021–2030)**

The TAG:

- Congratulates WHO and Member States on the endorsement of the *Regional Strategic Framework for Vaccine-preventable Disease and Immunization in the Western Pacific (2021–2030)* by the WHO Regional Committee in October 2020.
- Notes that the strategies of the Regional Strategic Framework have been robust and well utilized for responding to the COVID-19 pandemic in the Western Pacific through the four WHO strategic pillars for COVID-19 vaccination response support: access and availability; vaccine deployment and immunization; vaccine and immunization safety; and information, monitoring and evaluation.
- Notes that the COVID-19 vaccination roll-out has offered several Member States an opportunity to implement strategies of the Regional Strategic Framework such as life-course vaccination, closing immunity gaps using tailored strategies and emergency response preparedness.
- Notes that many countries and areas of the Region have made substantial progress in the COVID 19 vaccine roll-out and vaccination coverage, providing a basis to define potential coverage targets in a regional COVID-19 vaccination road map.
- Supports the development of the *Western Pacific Regional Road Map for COVID-19 Vaccination Response (2021–2022)*, including setting vaccination coverage targets and enhancing synergies with the Regional Strategic Framework.
- Notes that experience with SARS-CoV-2 infection is still limited and that it is critical that we continue to accumulate experience and knowledge, especially with respect to transmission, acute and long-term disease outcomes, and the potential role of vaccination programmes in achieving public health goals.
3.2 Recommendations

3.2.1 Recommendations for Member States

COVID-19 vaccine access and availability

The TAG reiterates that Member States:

1. continue to strengthen systems, processes and mechanisms for assuring the safety, quality and efficacy of COVID-19 vaccines in pre- and post-authorization phases;
2. ensure regulatory preparedness including adjustment of regulatory authorizations in case of variations against EUL to ensure that vaccines made available through COVAX and bilateral arrangements can be brought rapidly into countries; and
3. strengthen mechanisms for the detection and response to substandard and falsified vaccines.

The TAG urges all Member States to:

4. continue to participate in and strengthen the Regional Alliance of NRAs as a mechanism for cooperation in regulation of COVID-19 vaccines;
5. support regional and global mechanisms for solidarity towards equity of vaccine access, including generously supporting low- and middle-income countries in the Region to access COVID-19 vaccines to cover their populations; and
6. give special attention to PICs to ensure all adult populations have access to COVID-19 vaccines considering their special context of:
   a. high level of comorbidities from noncommunicable diseases;
   b. low capacity of their health systems to provide critical care, with high risk that health systems will be overwhelmed even with a few severe COVID-19 cases; and
   c. their geography posing difficult challenges to mounting an emergency response.

COVID-19 vaccine deployment and immunization

The TAG urges all Member States to:

1. accelerate vaccination of high-priority groups, especially older adults and those with comorbidities, and further expand vaccination to other priority risk groups, including sociodemographic and employment groups;
2. update NDVPs to address additional risk groups and emerging issues and challenges;
3. supplement human resource needs by engaging and training more HCWs and mobile vaccination teams;
4. ensure that vaccines are delivered and distributed efficiently with due consideration of cold chain requirements from central storage to subnational levels;
5. intensify vaccination delivery through expansion of vaccination sites, utilization of non-hospital settings, promotion of mass vaccination activities and mobile outreach vaccination for marginalized and vulnerable populations;
6. develop and implement new strategies to address vaccine hesitancy, manage product preference and prevent discrimination related to vaccination status; and
7. address barriers to electronic reporting by developing fit-for-purpose, user-friendly data entry platforms (e.g. computerized databases, smartphones).

COVID-19 vaccine and immunization safety

The TAG urges middle-income countries and PICs to:

1. strengthen subnational capacity for AEFI investigation by forming and training investigation teams;
2. enhance capacity for early detection and clinical management of AESI, such as TTS and myocarditis, at both national and subnational levels by:
   a. training clinical staff on detection and initial clinical management of these AESI; and
   b. equipping clinical staff with guidance, diagnostic tests and essential medicines for management of these AESI;
3. increase capacity for causality assessment by:
   a. training and expanding the members of national and subnational AEFI committees to conduct timely and comprehensive causality assessments of AESI and deaths following immunization; and
   b. proactively seeking support from WHO as needed.

The TAG urges all Member States to:

4. share COVID-19 vaccine safety data between the national immunization programme and the NRA for timely decision-making to ensure vaccine safety;
5. expand sharing vaccine and immunization safety data with WHO, including sharing adverse event reports with the global safety database, VigiBase;
6. prepare and use tailored risk communication tools and strategies to address safety concerns arising with COVID-19 vaccination, including TTS, myocarditis and coincidental deaths, among vaccinated adults.
7. continue efforts to strengthen and expand the national and subnational capacities for COVID-19 vaccine-related AEFI surveillance and management to:
   a. manage an increasing number of vaccine and immunization safety events due to large and increasing numbers of people vaccinated with COVID-19 vaccines; and
   b. ensure vaccine and immunization safety for COVID-19 vaccination programmes.

Information, monitoring and evaluation for COVID-19 vaccination response

The TAG calls on all Member States to:

1. continue to share up-to-date information and data on vaccine availability, deployment and immunization safety with WHO through the Weekly COVID-19 Vaccination and Safety Update;
2. include details of COVID-19 vaccination history in reporting of cases, and monitor COVID-19 infections in persons who have been fully vaccinated, especially those that result in hospitalization or death;
3. monitor and detect circulating variants of interest (VOI) and variants of concern (VOC) for better planning, monitoring and evidence-based decision-making;
4. conduct COVID-19 vaccination intra-action reviews and post-introduction evaluation, where feasible, with the support of WHO and partners; and
5. consider conducting COVID-19 vaccine effectiveness and impact studies to expand the evidence base for these newly developed vaccines and document the impact in real-world settings.

Measles and rubella elimination in the Western Pacific Region

The TAG calls on all Member States to:

1. ensure that the national strategy and plan of action for measles and rubella elimination are developed and updated;
2. urgently define and implement targeted immunization strategies to address residual measles and rubella immunity gaps among children, adolescents and young adults;
3. consider implementing school entry vaccination checks as one strategy to fill immunity gaps in young children;
4. conduct a detailed assessment of the risk factors associated with transmission of measles infection in health-care facilities to guide further efforts for preventing nosocomial spread;
5. leverage COVID-19 vaccination demand as an opportunity to engage and schedule vaccination for adolescents and adults who are susceptible to measles and rubella, wherever feasible;
6. identify risks and develop strategies to prevent outbreaks resulting from importation in all countries; successful strategies applied during the recent global measles resurgence should be implemented to ensure measles-rubella vaccination of high-risk groups, including foreign students and workers, prior to travel;
7. pursue the goal of rubella elimination by establishing a target year for rubella elimination and working towards establishing or strengthening CRS surveillance;
8. ensure that sensitive, case-based, laboratory-supported surveillance of acute fever and rash (AFR) is maintained at national and subnational levels and that health intelligence data are used to identify high-risk populations by:
   a. strengthening laboratory capacity to conduct and analyse genotype data to demonstrate lineages and transmission patterns, and
   b. expanding capacity for measles and rubella serological and molecular testing, including rapid testing, within the Pacific subregion; and
9. carefully assess breakthrough infections among vaccinated individuals and use additional laboratory testing to classify these cases as primary or secondary vaccine failures.

**Polio eradication in the Western Pacific Region**

The TAG urges:

1. all Member States to:
   a. achieve and maintain >90% coverage with all doses of polio vaccine at the national level;
   b. complete national inventories to identify poliovirus PIM and submit reports (WHO PIM Form 2) to WHO by 1 November 2021; and
   c. follow WHO guidance on detection of immunodeficiency-associated VDPV (iVDPV);
2. Member States that use OPV in their national immunization schedules to proceed with the introduction of a second dose of IPV;
3. China to maintain enhanced acute flaccid paralysis (AFP) surveillance and expanded environmental surveillance for at least six months and determine the necessity and scope of vaccination response based on regular risk assessment;
4. the Philippines to maintain highly sensitive polio surveillance (AFP and environmental) for at least one year from the most recent detection of VDPV, noting the persisting vulnerability of this setting;
5. Malaysia to submit to WHO the final report on outbreak response measures and evidence of interruption of cVDPV types 1 and 2 before the end of July 2021;
6. Malaysia and Viet Nam to maintain and Papua New Guinea to restart environmental surveillance;
7. Cambodia and the Lao People’s Democratic Republic to initiate environmental surveillance as an integral part of routine surveillance; and
8. China and Viet Nam to establish and operationalize a National Authority for Containment, start the certification process as soon as possible and submit certificates of participation to the Global Certification Commission no later than 31 December 2021.

**Hepatitis A control in the Western Pacific Region**

The TAG calls on all countries in which hepatitis A is a public health concern or that are considering introducing hepatitis A vaccine to:
1. have in place or establish sensitive surveillance for hepatitis A with laboratory confirmation and consider conducting a serologic survey to guide control strategies;
2. consider the introduction of hepatitis A vaccine into the routine immunization schedule for children 1 year and under, if indicated on the basis of incidence of acute hepatitis A or change in the endemicity from high to intermediate, and the cost-effectiveness of vaccine introduction;
3. consider conducting targeted vaccination of high-risk groups in low and very low endemicity settings to provide individual health benefits; and
4. consider developing novel strategies, in collaboration with non-health sectors such as labour, tourism, education and defence, to provide preventive immunization for adults and adolescents.

Rabies control in the Western Pacific Region

The TAG calls on all Member States to:

1. engage the national rabies programme, national immunization programme and other relevant stakeholders to identify gaps and potential areas of collaboration, recognizing the importance of bite prevention and the critical role of canine rabies vaccination in preventing human rabies exposure; and
2. develop collaborative action plans to strengthen access to adequate post-exposure prophylaxis, including prompt wound management, tetanus toxoid booster if applicable, rabies immune globulin where indicated, and quality-assured rabies vaccine.

Western Pacific Regional Road Map for COVID-19 Vaccination Response in line with the Regional Strategic Framework for Vaccine-Preventable Diseases and Immunization in the Western Pacific (2021–2030)

The TAG calls on all Member States to:

1. continue to monitor WHO policy recommendations that are developed as the science evolves, especially through SAGE processes, given the dynamic nature of the pandemic and the public health goals that can be achieved through vaccination;
2. further collaborate with WHO and partners to implement COVID-19 vaccination through the lens of the Regional Strategic Framework, seeking opportunities to strengthen immunization systems, expand life-course vaccination, increase demand for immunization services, and improve vaccine safety monitoring and risk communication systems;
3. work with WHO to develop and implement the Regional Road Map; and
4. build on COVID-19 vaccination experiences to sustain the improvements and expansions in immunization delivery and monitoring systems including new approaches to social listening and real-time response to vaccine hesitancy.

3.2.2 Recommendations for WHO

The TAG requests WHO to consider the following:

COVID-19 vaccine access and availability

Regulations

1. Continue to support Member States to ensure regulatory approvals and meet regulatory requirements for COVID-19 vaccines in a timely manner.
2. Continue to strengthen NRAs using the lessons and experiences gathered during the COVID-19 pandemic, including their role in pharmacovigilance, and other public health emergencies.
3. Strengthen the Regional Alliance for NRAs as a platform to build trust, cooperation and collaboration across Member States in the Region.
4. Support Member States’ participation in the global mechanism for surveillance, detection, reporting and response to substandard and falsified medical products, including COVID-19 vaccines.

Access

1. Continue and strengthen efforts to maximize vaccine supply and transparent allocation across all channels, including through COVAX, direct procurement and donations.
2. Strengthen sharing of the most up-to-date information on regulatory status, sources, prices and production capacity to support Member States’ decision-making and planning related to bilateral procurement and donations of COVID-19 vaccines.
3. Support countries to effectively use bilateral arrangements to increase timely and equitable access to and availability of COVID-19 vaccines across the Region.
4. Provide regional input to COVAX so that their policies ensure equitable allocation and supply of vaccines, including effective mechanisms for dose-sharing and donations.
5. Support countries to develop vaccine needs scenarios based on public health and social/economic goals.
6. Support Member States with capacity for vaccine production to participate in global mechanisms to facilitate expansion of vaccine production, including technology transfers and research and development initiatives for mRNA and other vaccine platforms.

COVID-19 vaccine deployment and immunization

1. Advocate to Member States and partners to ensure intra-country equitable vaccination of priority target populations, particularly older adults, individuals with comorbidities, essential workers outside the health sector, and sociodemographic or employment groups at elevated risk.
2. Continue monitoring and analysing vaccine utilization and coverage by priority group and dose for each country to address issues and challenges in COVID-19 vaccine deployment.
3. Continue providing technical guidance to Member States to update their NDVPs.
4. Provide technical support to Member States to develop and implement tailor-made vaccination strategies by facilitating exchanges of experience, good practices and lessons among Member States and partners.
5. Work with Member States and partners to mobilize resources to expand vaccination sites at subnational levels, utilize non-hospital settings, and conduct mass vaccination activities and mobile outreach vaccination for marginalized and vulnerable populations.
6. Support Member States and partners to address vaccine hesitancy, manage brand preference, and prevent discrimination through advocacy, capacity-building, and risk communication and community engagement with consideration of country-specific context.

COVID-19 vaccine and immunization safety

1. Closely monitor AEFI and AESI across the Region in collaboration with global and regional immunization safety partners to provide Member States with timely alerts on COVID-19 vaccine safety issues.
2. Continue providing Member States with regular updates on COVID-19 vaccine safety issues to support Member States in making vaccine programme decisions.
3. Facilitate prompt sharing among Member States and partners of data on serious AEFI and AESI to support decision-making on COVID-19 vaccination.
4. Continue supporting middle-income countries and PICs by providing guidelines and training materials and facilitating training to:
   a. establish and enhance national and subnational capacities for investigation and management of serious AEFI;
   b. strengthen national and subnational AEFI committees in timely and comprehensive causality assessment, upon request; and
c. strengthen national COVID-19 vaccination safety data management.

5. Support Member States to collect information on COVID-19 vaccine attitudes and intentions, develop strategies to overcome hesitancy, and build and sustain acceptance for COVID-19 vaccination.

Information, monitoring and evaluation for COVID-19 vaccination response

1. Continue to provide countries and areas with updated information on characteristics and safety of COVID-19 vaccines used or to be used in the Region.

2. Continue collaborating with Member States of the Region in collecting, analysing and sharing information and data on vaccine availability, deployment and immunization safety through the Weekly COVID-19 Vaccination and Safety Update and the COVID-19 vaccination country/area profiles.

3. Develop and share a regional bulletin on COVID-19 vaccination and safety periodically (e.g. every two weeks) for Member States and partners.

4. Provide support to Member States to:
   a. plan and conduct vaccination intra-action reviews and post-introduction evaluations;
   b. monitor the impact of COVID-19 vaccination on transmission and epidemiology of COVID-19;
   c. plan and conduct vaccine effectiveness and impact studies in selected countries to ensure regional representation in the evidence base for vaccines being used in the Region;
   d. monitor COVID-19 infections in persons who have been fully vaccinated, especially those that result in hospitalization or death; and
   e. make evidence-based decisions to adjust and optimize COVID-19 vaccination strategies.

Measles and rubella elimination in the Western Pacific Region

1. Work with WHO headquarters and priority Member States to facilitate the implementation of the Global Measles Outbreak Strategic Response Plan 2021–2023 in the Western Pacific Region.

2. Strongly advocate for accelerated progress towards regional and global measles and rubella elimination.

3. Support priority Member States that have not achieved high population immunity to plan and conduct high-quality measles–rubella SIAs targeting children born after the last SIA.

4. Work with Member States and partners to develop platforms for vaccination of adults susceptible to measles and rubella by leveraging COVID-19 vaccination activities in a wide range of settings, including partnerships with employers, to reach HCWs, college students, overseas workers and others.

5. Work with Member States and partners to develop and implement targeted vaccination strategies to fill residual measles and rubella immunity gaps among children, adolescents and young adults, including at school entry.

6. Engage with WHO headquarters on issues of measles susceptibility among adolescents and adults, including issues of waning immunity, particularly in countries where measles has been eliminated for an extended period, to review the implications for a potential expanded vaccination schedule for this age group.

7. Maintain high-quality WHO-accredited laboratories within the Western Pacific Region and provide support for on-site accreditation visits (travel regulations permitting).

8. Support priority Member States to develop genotyping capability and improve the capacity of national laboratories to support surveillance.

9. Support priority national verification committees to produce high-quality documentation of their country’s progress towards elimination or to submit evidence for verifying measles and rubella elimination.
10. Continue providing support to the Philippines for expanding subnational vaccine-preventable disease laboratory capacity.
11. Continue providing support to PICs to implement a field study using a rapid diagnostic test for measles antibody detection.
12. Finalize and publish a regional field guide on preparedness for and response to measles and rubella outbreaks.

**Polio eradication in the Western Pacific Region**

1. Continue supporting Member States to:
   a. achieve and maintain a high level of population immunity against polio;
   b. introduce the second dose of IPV into national immunization schedules, including special attention to countries with low IPV coverage such as Papua New Guinea and the Philippines;
   c. prevent future emergence of cVDPVs;
   d. sustain and strengthen the performance of AFP surveillance; and
   e. maintain and expand environmental surveillance.
2. Maintain the high-quality polio laboratory network in the Region.
3. Provide technical support to Member States to implement laboratory containment activities.
4. Continue updating and disseminating guidance on potential new outbreak response strategies, including best use of nOPV2 and other new vaccine strategies, refinement of scenario-based outbreak response, and good outbreak response practices from the recent successful responses in Malaysia and the Philippines.

**Hepatitis A control in the Western Pacific Region**

1. Assess the landscape and role that hepatitis A vaccination strategies may have in hepatitis A control in the Region, including by synthesizing data on hepatitis A epidemiology, disease burden and vaccine cost-effectiveness in the Region.
2. Review current practices in hepatitis A surveillance in Member States in the Region and consider the feasibility of a regional approach to surveillance.
3. Provide technical support to Member States that plan to implement hepatitis A surveillance, serologic studies, vaccine cost-effectiveness studies or vaccine introduction.

**Rabies control in the Western Pacific Region**

1. Support endemic countries of the Region to explore gaps and potential areas of collaboration among rabies programmes, national immunization programmes and other relevant stakeholders.
2. Support endemic countries of the Region to develop collaborative action plans to strengthen access to adequate post-exposure prophylaxis and to mobilize necessary resources.
3. Consider the potential role of pre-exposure prophylaxis in highly endemic areas in the regional strategic approach to rabies.

**Regional Road Map for COVID-19 Vaccination Response in the Western Pacific in line with the Regional Strategic Framework for Vaccine-preventable Diseases and Immunization in the Western Pacific (2021–2030)**

1. Publish the Regional Strategic Framework as soon as possible.
2. Work with Member States to develop the Regional Road Map.
3. Support Member States in implementing the Regional Road Map to achieve the proposed objectives and targets.
4. Given the dynamic nature of the pandemic and the public health goals that can be achieved through vaccination, help countries to continue to monitor WHO policy recommendations.
that are developed as the science evolves, especially through SAGE processes, and incorporate this into regular updates of the Regional Road Map.

5. Support Member States in sustaining and building on the improvements and expansion in immunization systems achieved through COVID-19 vaccination efforts.
30TH MEETING OF THE TECHNICAL ADVISORY GROUP ON IMMUNIZATION AND VACCINE-PREVENTABLE DISEASES IN THE WESTERN PACIFIC REGION

Virtual
22–25 June 2021

TECHNICAL ADVISORY GROUP MEMBERS

Dr Christopher MORGAN, Senior Technical Advisor, Immunisation, Jhpiego, 1615 Thames St, Baltimore, United States of America; Email: christopher.morgan@immunizationplus.org

Dr Jong-Koo LEE, Professor, School of Medicine, Seoul National University, 1 Gwanak-ro, Gwanak-gu 08826, Seoul Republic of Korea, Email: kcdc7000@gmail.com; docmohw@snu.ac.kr

Professor Helen OH MAY LIN, Senior Consultant; Division of Infectious Disease; Changi General Hospital, 2, Simei Street 3, Singapore 529889, Republic of Singapore, Telephone:+96328849; +6569366595, Email: helen_oh@cgh.com.sg, helen.oh.m.l@singhealth.com.sg

Dr Kimberley FOX, Director, Division of Bacterial Diseases, National Center for Immunization and Respiratory Diseases, Centers for Disease Control and Prevention
1600 Clifton Road, Atlanta, Georgia 30329, United States of America, E-mail: kaf6@cdc.gov, kfox@cdc.gov

Dr JIN Tongling, Program Official, Immunization Division, Bureau of Diseases Prevention and Control, China National Health Commission, No 1 Xizhimen Outer South Road, Xicheng District, Beijing 100044, People’s People’s Republic of China, Telephone: +86(10)-68792114,
E-mail: jintl@nhc.gov.cn

Professor LAU Yu-Lung, Doris Zimern Professor in Community Child Health, Chair Professor of Paediatrics, Scientific Committee on Vaccine-Preventable Diseases, Centre for Health Protection, Department of Health, 21/F Wu Chung House, 213 Queen’s Road East, Wanchai, Hong Kong, Telephone:+852 2833 0111 Facsimile: +852 2836 0071, Email: lauylung@hku.hk
Dr Takaji WAKITA, Director-General, National Institute of Infectious Diseases, Toyama 1-23-1, Shinjuku-ku, Tokyo 162-0052, Japan, E-mail: wakita@nih.go.jp, wakita@niid.go.jp

Dr Hiroshi YOSHIKURA, Emeritus Member, National Institute of Infectious Diseases, Toyama 1-23-1, Shinjuku-ku, Tokyo 162-0052, Japan, E-mail: yoshikura@nih.go.jp, yoshikura164@nifty.com

1. TEMPORARY ADVISERS

Dr Rolando Enrique DOMINGO, Director General, Food and Drug Administration, 1781 Civic Drive Alabang, Muntinlupa, Philippines, Telephone:+63 02-8857 1900, Email: odg@fda.gov.ph

Professor David DURRHEIM, Professor of Public Health Medicine, University of Newcastle, University Dr, Callaghan, New South Wales 2308, Australia, Telephone: 02-49246395, Fax: 02-49246247, Email: david.durrheim@newcastle.edu.au

Dr Nobuhiko OKABE, Director-General, Kawasaki City Institute for Public Health, 5-13-10 Oshima Kawasaki-ku, Kawasaki City, Kanagawa 210-0834, Japan, Telephone:+81 44 276 8250, Facsimile: 81 44 288 2044, Email: okaben@city.kawasaki.jp

Dr Ilisapeci VERETI-TUIBEQA, Consultant Paediatrician, Ministry of Health and Medical Services, Dinem House, 88 Amy Street, Government Buildings, Suva, Republic of Fiji, Telephone:+679 7522778, Email: beth.vereti@gmail.com

2. PARTICIPANTS

AUSTRALIA

Ms Hope PEISLEY, Assistant Secretary, Vaccine Policy Branch, COVID-19 Vaccine Taskforce Division, Australian Government Department of Health, Canberra ACT 2601, Email: Hope.Peisley@health.gov.au

Ms Shona FALCONER, Director, International Strategies Branch, Australian Government Department of Health, Canberra ACT 2601, Email: Shona.FALCONER@Health.gov.au

Ms Samantha SIRIPOL, Assistant Director, International Strategies Branch, Australian Government Department of Health, Canberra ACT 2601, Email: Samantha.Siripol@health.gov.au

BRUNEI DARUSSALAM

Dr Linda LAI, NIP Programme Manager, Head, Department of Child Health Services, Ministry of Health, Commonwealth Drive, Bandar Seri Begawan BB 3910, Telephone:+673 8780078, Fax:+673 2381165, Email: linda.lai@moh.gov.bn
**CAMBODIA**

**Mr ORK Vichit**, National Immunization Program Manager, Deputy Director, National Maternal and Child Health Centre, Ministry of Health, National Road No. 6, Village Kein Khlang, Sangkat Prek Leap, Khan Chroy Changva, Phnom Penh, Telephone: +855-12-830-548, Email: orkvichit@yahoo.com

**Dr THEME Viravann**, Deputy Director, Department of International Cooperation, Ministry of Health, No. 80, Samdech Penn Nuth Blvd., (289), Sangkat Boeung Kak, Toul Kork District, Phnom Penh, Telephone: +855-99-323-536, Email: tviravann@yahoo.com

**Yong VUTTHIKOL**, Deputy Manager, National Immunization Program, Ministry of Health, No 80, Samdech Penn Nuth Blvd, (289), Sangkat Boeung Kak, Toul Kork District, Phnom Penh, Telephone: +855-12-897-043, Email: yongvutthikol@gmail.com

**Mr Siphan SOVANNARA**, VPD Surveillance Officer, National Immunization Program, Ministry of Health, National Road No. 6, Village Kein Khlang, Sangkat Prek Leap, Khan Chroy Changva, Phnom Penh, Telephone: +855-17-545-373, Email: siphan_sovannara@yahoo.com

**CHINA**

**Dr YIN Zundong**, Department Director/Researcher, Chinese Center for Disease Control and Prevention, #27 Nanwei Road, Xicheng District, Beijing 100050, Telephone: +86 13520056303, Email: yinzd@chinacdc.cn

**Dr ZHANG Yan**, Researcher, Chinese Center for Disease Control and Prevention, #27 Nanwei Road, Xicheng District, Beijing 100050, Telephone: +86 13911530796, Email: zhangyan@chinacdc.cn

**Dr LI Yan**, Associate Researcher, Chinese Center for Disease Control and Prevention, #27 Nanwei Road, Xicheng District, Beijing 100050, Telephone: +86 15210659417, Email: liyan2@chinacdc.cn

**Dr LI Yuanqui**, Associate Researcher, Chinese Center for Disease Control and Prevention, #27 Nanwei Road, Xicheng District, Beijing 100050, Telephone: +86 15601066655, Email: liyq@chinacdc.cn
FIJI

Dr Rachel DEVI, Head, Family Health Unit, Ministry of Health and Medical Services, Level 3, Dinem House, 88 Amy Street, Suva, Telephone:+679 998 1893, Email: rachel.devi@govnet.gov.fj

HONG KONG

Dr Anne CHEE, Principal Medical and Health Officer, Programme Management and Vaccination Division, Room 418, Centre for Health Protection, 147C Argyle Street, Kowloon, Telephone: +852 21252698, Fax: +852 27156815, Email: anne_chee@dh.gov.hk

Dr Siu Kuen MAK, Senior Medical and Health Officer, Vaccine Preventable Disease Section, Centre for Health Protection, 4/F, 147C Argyle Street, Kowloon, Telephone: +852 21252230, Fax: +852 27110927, Email: smo_sur3@dh.gov.hk

JAPAN

Dr Shuichiro HAYASHI, Director, Immunization Office, Health Service Division, Ministry of Health, Labour and Welfare, 1-2-2 Kasumigaseki, Chiyoda-ku, Tokyo 100-8916, Telephone:+81 3 5253 1111 loc. 2071, Email: hayashi-shuichiro@mhlw.go.jp

LAO PEOPLE’S DEMOCRATIC REPUBLIC

Dr Viengkhan PHIXAY, Deputy Director, Maternal and Child Health Center, Ministry of Health, Vientiane, Telephone:+856 20 22225953 Email: vkphixay@gmail.com

Dr Kongxay PHOUNPHENGHACK, Deputy, Mother and Child Health Center, Ministry of Health, Vientiane, Telephone:+856 20 22447573, Email: kongxay123@gmail.com

Dr Chansay PATTHAMAVONG, Deputy, Mother and Child Health Center, Ministry of Health, Vientiane, Telephone: +856 20 55606480, Email: chansay_epi@yahoo.com

Associate Professor Khampe PHONGSAVANH, NITAG Chair, Expanded Programme on Immunization, Mother and Child Health Center, Ministry of Health, Vientiane, Telephone: +856 21 285321, Email: khampe5@hotmail.com

MACAO

Dr LEONG Iek Hou, Head, Unit of Communicable Disease Prevention and Diseases Surveillance, CDC, Health Bureau, CDC-NDIV, 7/F Building "Hot Line", No. 335-341, Alameda Dr Carlos d'Assumpcao, Macao, Telephone: +853 28533525, Fax: +853 28533524, Email: ihleong@ssm.gov.mo

Ms CHAN Choi Wan, Senior Technical Officer, Unit of Communicable Disease Prevention and Diseases Surveillance, CDC, Health Bureau, CDC-NDIV, 7/F Building "Hot Line", No. 335-341, Alameda Dr Carlos d'Assumpcao, Macao, Telephone: +853 28533525, Fax: +853 28533524, Email: sharonchan@ssm.gov.mo
MALAYSIA

Dr Rozita Ab RAHMAN, Senior Principal Assistant Director, Family Health Development Division, Ministry of Health, Putrajaya,
Telephone: +603 88834042, Email: drrozita.ar@moh.gov.my

Dr Saidatul Norbaya BUANG, Senior Principal Assistant Director, Family Health Development Division, Ministry of Health, Putrajaya,
Telephone:+603 88834002, Email: s.norbaya@moh.gov.my

Dr Jamiatul Aida Md SANI, Senior Principal Assistant Director, Family Health Development Division, Ministry of Health, Putrajaya,
Telephone: +603 8883 4504, Email: jamiatul@moh.gov.my

Dr Mohd Hanif bin ZAILANI, Head of Sector, Disease Control Division,
Ministry of Health, Putrajaya, Telephone: +603 88834503,
Email: hanif@moh.gov.my

MICRONESIA, FEDERATED STATES OF

Mr Carter APAISAM, Immunization Manager, Division of Health Services Division of Health Services, Department of Health and Social Affairs, P.O. Box PS 70, Capitol Street, Palikir, FM 96941,
Telephone:  +691 3202691, Fax: +691 3205263, Email: capaisam@fsmhealth.fm

MONGOLIA

Dr Narangerel DORJ, Senior Expert, Division of Public Health Response, Communicable Disease Control and Prevention, Ministry of Health, Government Building VIII, Olympic Street-2, Sukhbaatar District, Ulaanbaatar, Telephone: +976 99164451, Fax: +976 51 263631,
Email: naraa61us@yahoo.com

Dr Altanchimeg SAMDAN, Epidemiologist, Vaccine Preventable Diseases Surveillance, Immunization Department, National Centre for Communicable Diseases, Ministry of Health, Nam Yan Ju Street 1, Bayanzurkh District, Ulaanbaatar, Telephone: +976 99742820,
Fax: +976 11 451798, Email: altanchimeg2@yahoo.com,
nccd.altanchimeg@gmail.com

Dr Dashpagam OTGONBAYAR, Head, Immunization Department, National Centre for Communicable Diseases, Nam Yan Ju Street 1, Bayanzurkh District, Ulaanbaatar, Telephone: +976 88081464,
Email: dashpagam08@gmail.com

Dr Nyamdavaa PAGVAJAV, Chair, NITAG-Mongolia, Ministry of Health, Government Building VIII, Olympic Street-2, Sukhbaatar District, Ulaanbaatar, Telephone: +976 99112306, Email: nymadawa@gyals.mn
**NEW ZEALAND**

Ms Kath BLAIR, Manager, Immunisation, Child and Community Health Group, Ministry of Health, 133 Molesworth St., Wellington 6011, Email: Kath.Blair@health.govt.nz

Ms Sarah EMERSON, Principal Advisor, Immunisation, Child and Community Health Group, Ministry of Health, 133 Molesworth St., Wellington 6011, Email: Sarah.Emerson@health.govt.nz

**PAPUA NEW GUINEA**

Dr Edward WARAMIN, Manager, Population & Family Health Services, Public Health Division, National Health Service Standards, Ministry of Health, P.O. Box 807, Waigani, National Capital District, Port Moresby, Telephone: +675 76065817, Email: edwaramin@yahoo.com.au

Ms Martha POGO, A/EPI Manager, Public Health Division, National Health Department, Ministry of Health, P.O. Box 807, Waigani, National Capital District, Port Moresby, Telephone: +675 79430218, Email: martzpogo@gmail.com

Ms Vienna NONWO, Immunisable Disease Surveillance and Data Officer, Public Health Division, National Health Department, EPI, P.O. Box 807, Waigani, National Capital District, Port Moresby, Telephone: +675 3013723/71125375, Email: nonwovienna@gmail.com

**PHILIPPINES**

Dr Kim Patrick TEJANO, Medical Officer IV, Disease Prevention and Control Bureau, National Immunization Program, Department of Health, San Lazaro Compound, Rizal Avenue, Sta Cruz, Manila, Email: kpstejano@doh.gov.ph

Dr Norielyn EVANGELISTA, Medical Officer IV, Disease Prevention and Control Bureau, System Integration, Department of Health, San Lazaro Compound, Rizal Avenue, Sta Cruz, Manila, Email: nmevangelista@doh.gov.ph

Dr Joannah Kaye BORALLO, Medical Officer III, Disease Prevention and Control Bureau, National Immunization Program, Department of Health, San Lazaro Compound, Rizal Avenue, Sta Cruz, Manila, Email: jkbborallo@doh.gov.ph

Ms Gretchen M. ESOLE, Nurse II, Epidemiology Bureau, Public Health Surveillance Division, Department of Health, San Lazaro Compound, Rizal Avenue, Sta Cruz, Manila, Telephone: +632 8651 7800 local 2930, Email: gmesole@doh.gov.ph
REPUBLIC OF KOREA  Dr Sung Nam KIM, Deputy Scientific Director, Division of Immunization, Korea Disease Control and Prevention Agency, Osong Health Technology Administration Complex, 187, Osongsaengmyeong 2-ro, Osong-eup, Heungdeok-gu, Cheongju-si, Chungcheongbuk-do, Telephone: +82-43-719-8391, Fax: +82-43-719-7599, Email: ksn1907@korea.kr

Dr Yeon-Kyeng LEE, Team Leader, Adverse Event Management Team, Korea Disease Control and Prevention Agency, Osong Health Technology Administration Complex, 187, Osongsaengmyeong 2-ro, Osong-eup, Heungdeok-gu, Cheongju-si, Chungcheongbuk-do, Telephone: +82-43-719-7360, Email: yeonkyenglee@korea.kr

SINGAPORE  Associate Professor CHONG Chia Yin, Senior Consultant, Department of Paediatrics, KK Women's and Children's Hospital, 100 Bukit Timah Road, Singapore 229899, Telephone: +65 629 34044, Fax: +65 629 17923, Email: Chong.Chia.Yin@singhealth.com.sg

Mr Yuske KITA, Senior Public Health Officer (Strategy and Prevention), Communicable Diseases Division, Ministry of Health Singapore, College of Medicine Building, 16 College Road, Singapore 169854, Mobile: +65 9765 1780, Fax: +65 6221 5528, Email: Yuske_Kita@moh.gov.sg

SOLOMON ISLANDS  Ms Jennifer ANGA, National EPI Coordinator, Reproductive and Child Health Division, Ministry of Health and Medical Services, P.O. Box 349, Honiara, Email: janga@moh.gov.sb

TONGA  Ms Atalua Fatafesi TEI, Supervising Nursing Sister for Public Health/EPI Coordinator, Public Health Division, Ministry of Health, P.O. Box 59, Nuku’alofa, Email: ataluafutei@gmail.com

VANUATU  Mr Simon SAMSON, National EPI Coordinator, Ministry of Health, VAN Government, PMB 9009, Port Vila, Telephone:+678 22512, Email: ssamson@vanuatu.gov.vu

VIET NAM  Professor DANG Duc Anh, NIHE Director, EPI Manager, National Institute of Hygiene and Epidemiology, 1 Yersin St., Hanoi, Telephone:+84 903229425, Email: dda@nihe.org.vn

Associate Professor DUONG Thi Hong, NIHE Vice Director, EPI Deputy Manager, National Institute of Hygiene and Epidemiology, 1 Yersin St., Hanoi, Telephone: +84 936255696, Email: hongepi2010@gmail.com

Professor NGUYEN Tran Hien, Chair of NITAG Viet Nam, National Institute of Hygiene and Epidemiology, 1 Yersin St., Hanoi, Telephone: +84 818194848, Email: ngtrhien@yahoo.com
3. OBSERVERS/REPRESENTATIVES

ASIAN DEVELOPMENT BANK

Mr Patrick OSEWE, Chief of the Health Sector Group, Asian Development Bank, 6 ADB Avenue, Mandaluyong City 1550, Philippines, Telephone: 632 8632 4444, Email: posewe@adb.org

Mr Ki Fung Kelvin LAM, Health Specialist, Social Sectors and Public Sector Management Division, Pacific Department, Asian Development Bank, 6 ADB Avenue, Mandaluyong City 1550, Philippines, Telephone: 632 8632 5460, Email: klam@adb.org

Dr Inez MIKKELSEN-LOPEZ, Health Specialist, Social Sectors and Public Sector Management Division, Pacific Department, Asian Development Bank, 6 ADB Avenue, Mandaluyong City 1550, Philippines, Telephone: 632 8632 4444, Email: imikkelsenlopez@adb.org

ASIA PACIFIC PEDIATRIC ASSOCIATION (APPA)

Dr Nina Dwi PUTRI, Member of APPA Technical Advisory Group Immunization, Department of Child Health, Indonesian Pediatric Society, Universitas Indonesia, Dr Cipto, Mangunkusumo National General Hospital, Salemba I, Street no. 5, Jakarta, Indonesia, Telephone:+ 6221 314 8610, Email: ninadwip@gmail.com/ nina.dwi@ikafkui.net

ASIAN LIVER CENTER (ALC)

Dr Samuel SO, Professor, Asian Liver Center, Stanford University School of Medicine, 780 Welch Road, C1130 Palo Alto, CA 94304, United States of America, Telephone: +1 650 736 8601, Fax: +1 650 736 8001, Email: samso@stanford.edu

AUSTRALIAN EXPERT TECHNICAL ASSISTANCE PROGRAM

Ms Alison LANG, Assistant Director, Indo-Pacific Centre for Health Security, Indo-Pacific Centre for Health Security Department of Foreign Affairs and Trade, 44 Sydney Ave., Forrest, ACT 2603, Australia, Telefax: +61 2 6261 1512, Email: alison_smith76@hotmail.com

Dr Michael WONG, Program Lead, Australian Expert Technical Assistance Programme for, Regional COVID-19 Vaccine Access: Policy, Planning and Implementation (AETAP-PPI), Australia, Telephone: +02 9845 1401, Email: Michael.Wong2@health.nsw.gov.au
CHINESE CENTER FOR DISEASE CONTROL AND PREVENTION (CCDC)

Professor YU Wenzhou, Professor of Medicine, National Immunization Programme, Chinese Center for Disease Control and Prevention, #27 Nanwei Road, Xicheng District, Beijing 100050, People's Republic of China, Telephone: +86 13811942899, Email: yuwz@chinacdc.cn

DEPARTMENT OF HEALTH, AUSTRALIA

Dr Chantal JACKSON, Director, Immunisation and Communicable Diseases Branch, Population Health Division Australian Government Department of Health, Canberra, Australia, Email: Chantal.jackson@health.gov.au

Dr Georgina PAPOUTSI, Assistant Director, Immunisation and Communicable Diseases Branch Population Health Division, Australian Government Department of Health, Canberra, Australia Email: georgina.papouts@health.gov.au

DEPARTMENT OF HEALTH, PHILIPPINES

Dr Beverly Lorraine HO, Director IV, Disease Prevention and Control Bureau, Department of Health, Philippines San Lazaro Hospital Compound, Rizal Avenue, Sta. Cruz Manila, Philippines, Email: bcho@doh.gov.ph

Dr Ma Nemia SUCALDITO, Medical Officer V/Division Chief, Epidemiology Bureau – Public Health Surveillance Division, Department of Health, Philippines, San Lazaro Hospital Compound, Rizal Avenue, Sta. Cruz, Manila, Philippines, Email: mlsucaldito@doh.gov.ph

Dr Gabriel BORLONGAN, Medical Officer IV, Disease Prevention and Control Bureau, Department of Health, Philippines, San Lazaro Hospital Compound, Rizal Avenue, Sta. Cruz, Manila, Philippines, Email: grborlongan@doh.gov.ph

Mr Vincent SUMERGIDO, Supervision Health Officer, Disease Prevention and Control Bureau, Department of Health, Philippines, San Lazaro Hospital Compound, Rizal Avenue, Sta. Cruz, Manila, Philippines, Email: vjsumer@do.com.ph

Ms Camille SAYSON, Supervising Program Health Officer, Disease Prevention and Control Bureau, National Immunization Program, Department of Health, Philippines, San Lazaro Hospital Compound, Rizal Avenue, Sta. Cruz, Manila, Philippines, Email: cvdsayson@doh.gov.ph

Ms Jena Camille AWA, Senior Health Program Officer, Disease Prevention and Control Bureau, National Immunization Program, Department of Health, Philippines, San Lazaro Hospital Compound, Rizal Avenue, Sta. Cruz, Manila, Philippines, Email: jcsawa@doh.gov.ph
Ms Joyce CORDON, Senior Health Program Officer, Disease Prevention and Control Bureau, National Immunization Program, Department of Health, Philippines, San Lazaro Hospital Compound, Rizal Avenue, Sta. Cruz, Manila, Philippines, Email: jccordon@doh.gov.ph

Mr Vince PANILLA, Nurse II, Epidemiology Bureau, Public Health Surveillance Division, Department of Health, Philippines, San Lazaro Hospital Compound, Rizal Avenue, Sta. Cruz, Manila, Philippines, Email: vincepanilarn@gmail.com

Ms Jessa SAYSON, Health Program Officer II, Epidemiology Bureau, Public Health Surveillance Division, Department of Health, Philippines, San Lazaro Hospital Compound, Rizal Avenue, Sta. Cruz, Manila, Philippines, Email: jfsayson@doh.gov.ph

GAVI, THE VACCINE ALLIANCE

Mr Charlie WHETHAM, Regional Head, Asia Pacific, Country Programmes, Gavi, the Vaccine Alliance Secretariat, Global Health Campus, Chemin du Pommier 40, 1218 Le Grand-Sacconex, Geneva, Switzerland, Telephone: +41 79 339 1400, Email: cwhetham@gavi.org

Dr Alice ABOU-NADER, Country Engagement Manager, The COVAX Facility, Gavi, the Vaccine Alliance, Global Health Campus, Chemin du Pommier 40, 1218 Le Grand-Sacconex, Geneva, Switzerland, Telephone: +852 7071 1724, Email: anader@gavi.org

INTERNATIONAL VACCINE INSTITUTE (IVI)

Dr Anh WARTEL, Deputy Director General of Clinical, Assessment, Regulatory, Evaluation, International Vaccine Institute, 1 Gwanak-ro, Gwanank-gu, Seoul 08826, Republic of Korea, Telephone: +822 881 1274, Fax: +822 872 2803, Email: anh.wartel@ivi.int

Dr Zenaida Reynoso MOJARES, Head of Clinical, Assessment, Regulatory, Evaluation, International Vaccine Institute, 1 Gwanak-ro, Gwanank-gu, Seoul 08826, Republic of Korea, Telephone: +822 881 1000, Fax: +822 872 2803, Email: zenaida.mojares@ivi.int

KAWASAKI INSTITUTE OF PUBLIC HEALTH

Dr Takako MISAKI, Director, Infectious Disease Surveillance Center, Kawasaki Institute for Public Health, 3-25-13 Tono-Machi Kawasaki-ku, Kawasaki City, Kanagawa-ken, Japan, Telephone:+81 44 276 8250, Fax: +81 44 288 2044, Email: tmsaki14@gmail.com
Dr Tomohiro KATSUTA, Pediatrics, St. Marianna University School of Medicine, 2-16-1, Suga, Miyamae-ku, Kawasaki City, Kanagawa-ken, Japan, Telephone:+81 44 977 8111, Fax: +81 44 976 8603, Email: katsuta-7-@marianna-u.ac.jp

Dr Mai OKUYAMA, Research Scientist, Immunization Policy Unit, Center for Surveillance, Immunization, and Epidemiologic Research, National Institute of Infectious Diseases, 1-23-1 Toyama Shinjuku-ku, Tokyo 1628640, Japan, Telephone: +81 3 5285 1111, Fax: +81 3 5285 1129, Email: mokuyama@niid.go.jp

KOREA DISEASE CONTROL AND PREVENTION AGENCY (KDCA)

Dr Yeonhee KIM, Deputy Scientific Director, Director for International Affairs, Korea Disease Control and Prevention Agency, 187, Osongsaengmyeong 2-ro, Osong-eup, Heungdeok-gu, Cheongju, North Chungcheong Province, Republic of Korea, Telephone: +82 43 719 7758, Fax No.: +82 43 719 7769, Email: knoonbi@korea.kr

Dr Soonryu SEO, Deputy Scientific Director, Division of Infectious Disease Control, Korea Disease Control and Prevention Agency, 187, Osongsaengmyeong 2-ro, Osong-eup, Heungdeok-gu, Cheongju, North Chungcheong Province, Republic of Korea, Telephone: +82 43 719 7150, Fax No.: +82 43 719 7190, Email: seos@korea.kr

Dr Ayoung LEE, Assistant Director, Director or International Affairs, Korea Disease Control and Prevention Agency, 187, Osongsaengmyeong 2-ro, Osong-eup, Heungdeok-gu, Cheongju, North Chungcheong Province, Republic of Korea, Telephone: +82 43 719 7760, Fax No.: +82 43 719 7769, Email: sss3567@korea.kr

Dr Su Yeon JEONG, Scientific Officer, Division of Infectious Disease Control, Korea Disease Control and Prevention Agency, 187, Osongsaengmyeong 2-ro, Osong-eup, Heungdeok-gu, Cheongju, North Chungcheong Province, Republic of Korea, Telephone: +82 43 719 7143, Fax No.:+82 43 719 7190, Email: soo77@korea.kr

Dr Hyungjun KIM, Scientific Officer, Division of Infectious Disease Control, Korea Disease Control and Prevention Agency, 187, Osongsaengmyeong 2-ro, Osong-eup, Heungdeok-gu, Cheongju, North Chungcheong Province, Republic of Korea, Telephone:+82 43 719 7152, Fax No.: +82 43 719 7190, Email: xprime@korea.kr
Dr Eun Young KIM, Korea Epidemic Intelligence Service Officer,
Division of Infectious Disease Control, Korea Disease Control
and Prevention Agency, 187, Osongsaengmyeong 2-ro,
Osong-eup, Heungdeok-gu, Cheongju, North Chungcheong
Province, Republic of Korea, Telephone: +82 43 719 7145,
Fax No.: +82 43 719 7190, Email: kimey714@korea.kr

Dr JaeEun LEE, Korea Epidemic Intelligence Service Officer,
Division of Infectious Disease Control, Korea Disease Control
and Prevention Agency, 187, Osongsaengmyeong 2-ro,
Osong-eup, Heungdeok-gu, Cheongju, North Chungcheong
Province, Republic of Korea, Telephone: +82 43 719 7151, Fax No.: +82 43 719 7190,
Email: imgracelee@korea.kr

Dr Yoomi NOH, Korea Epidemic Intelligence Service Officer,
Division of Infectious Disease Control, Korea Disease Control
and Prevention Agency, 187, Osongsaengmyeong 2-ro,
Osong-eup, Heungdeok-gu, Cheongju, North Chungcheong
Province, Republic of Korea, Telephone: +82 43 719 7153,
Fax No.: +82 43 719 7190, Email: yoom99@korea.kr

Dr Chung Min PARK, Korea Epidemic Intelligence Service
Officer, Division of Infectious Disease Control, Korea Disease
Control and Prevention Agency, 187, Osongsaengmyeong 2-ro,
Osong-eup, Heungdeok-gu, Cheongju, North Chungcheong
Province, Republic of Korea, Telephone: +82 43 719 7146,
Fax No.:+82 43 719 7190, Email: pcm81@korea.kr

Dr Gye Hee LEE, Researcher, Division of Infectious Disease
Control, Korea Disease Control and Prevention Agency, 187,
Osongsaengmyeong 2-ro, Osong-eup, Heungdeok-gu,
Cheongju, North Chungcheong Province, Republic of Korea,
Telephone: +82 43 719 7155, Fax No.: +82 43 719 7190,
Email: ghl1018@korea.kr

MINISTRY OF HEALTH,
MONGOLIA

Ms Yanjmaa BINDERIYA, Director of International Cooperation
Division of the Department of Public Administration,
and Management, Ministry of Health, Ulaanbaatar, Mongolia
Telephone: +976 99994560, Email: yanjmaa@moh.gov.mn

MINISTRY OF HEALTH AND
MEDICAL SERVICES (MHMS)
SOLOMON ISLANDS

Mrs Nancy PEGO, Acting Director, Reproductive Child Health
Division, Ministry of Health and Medical Services
Honiara, Solomon Islands, Telephone: +677 24580
Email: NPego@moh.gov.sb

NATIONAL CENTER FOR
GLOBAL HEALTH AND MEDICINE

Dr Masahiko HACHIYA, Director, Division of Global Health
Policy and Research, Department of Health Planning,
and Management, Bureau of International Health Cooperation, National Center for Global Health and Medicine, 1-21-1 Toyama, Shinjuku-ku, Tokyo 162-8655, Japan, Telephone: +813 3202 7181, Fax: +813 3205 7860, Email: m-hachiya@it.ncgm.go.jp

Dr Yasunori ICHIMURA, Assistant Director, Division of Partnership Development, Department of Global Network and Partnership, Bureau of International Health Cooperation, National Center for Global Health and Medicine, 1-21-1 Toyama, Shinjuku-ku, Tokyo 162-8655, Japan, Telephone: +813 3202 7181, Fax: +813 3205 7860, Email: yichimura@it.ncgm.go.jp

Dr Sumiyo OKAWA, Senior Research Fellow, Institute for Global Health Policy Research, Bureau of International Health Cooperation, National Center for Global Health and Medicine, 1-21-1 Toyama, Shinjuku-ku, Tokyo 162-8655, Japan, Telephone: +813 3202 7181, Fax: +813 3205 7860, Email: sokawa@it.ncgm.go.jp

Professor Kristine MACARTNEY, Director, National Centre for Immunisation Research and Surveillance Locked Bag 4001 Westmead, New South Wales 2145, Australia Telephone: +61 0861 7358, Fax: +61 2 9845 1418, Email: kristine.macartney@health.nsw.gov.au

Dr Kyoko SUDO, Research Fellow, National College of Nursing, Japan, 1 Chome-2-1 Umezono, Kiyose, Tokyo 204-0024, Japan Telephone: +81 42 495 2211, Email: salaudon@hotmail.com

Dr Ryusuke MATSUOKA, Director, Division of International Cooperation, National Institute of Infectious Diseases 1-23-1 Toyama Shinjuku-ku, Tokyo 162 8640, Japan, Telephone: +81 3 5285 1111, Fax No.: +81 3 5285 1150, Email: rmatsuok@nih.go.jp

Dr Keiko TANAKA-TAYA, Director, Immunization Group, Center for Surveillance, Immunization and Epidemiologic Research, National Institute of Infectious Diseases, 1-23-1 Toyama Shinjuku-ku, Tokyo 162 8640, Japan Telephone: +81 3 5285 1111, Fax No.: +81 3 5285 1129, Email: ktaya@nih.go.jp

Dr Motoi SUZUKI, Director, Center for Surveillance, Immunization and Epidemiologic Research, National Institute of Infectious Diseases, 1-23-1 Toyama Shinjuku-ku, Tokyo 162 8640, Japan, Telephone: +81 3 5285 1111, Fax No.: +81 3 5285 1129, Email: mosuzuki@niid.go.jp
Dr Masamichi MURAMATSU, Director, Department of Virology II and Epidemiologic Research, National Institute of Infectious Diseases, 1-23-1 Toyama Shinjuku-ku, Tokyo 162 8640, Japan, Telephone: +81 3 5285 1111, Fax No. +81 3 5285 1161, Email: muramatsu@nih.go.jp

Dr Makoto TAKEDA, Director, Immunization Group, Department of Virology III, National Institute of Infectious Diseases, 4-7-1 Gakuen, Musashimurayama, Tokyo 208 0011, Japan, Telephone: +81 42 561 0771, Email: mtakeda@nih.go.jp

Dr Tetsuro MATANO, Director, AIDS Research Center, National Institute of Infectious Diseases, 1-23-1 Toyama Shinjuku-ku, Tokyo 162 8640, Japan, Telephone: +81 3 5285 1111, Fax No.:+81 3 5285 1150, Email: tmatano@nih.go.jp

Dr Mutsuyo TAKAYAMA-ITO, Chief, Laboratory of Neurological Virus, Department of Virology I, National Institute of Infectious Diseases, 1-23-1 Toyama Shinjuku-ku, Tokyo 162 8640, Japan, Telephone: +81 3 5285 1111, Fax No.: +81 3 5285 2115, Email: mutsuito@niid.go.jp

Dr Chang Kweng LIM, Chief, Laboratory of Arboviruses, Department of Virology I, National Institute of Infectious Diseases, 1-23-1 Toyama Shinjuku-ku, Tokyo 162 8640, Japan, Telephone: +81 3 5285 1111, Fax No.: +81 3 5285 1188, Email: ck@nih.go.jp

Dr NGUYEN Cong Luat, Deputy Head, National EPI Office, National Institute of Hygiene and Epidemiology, 1 Yersin St., Hanoi, Viet Nam, Telephone: +84 915455434, Email: congluat@gmail.com

Dr NGUYEN Thanh Trung, Staff, National EPI Office, National Institute of Hygiene and Epidemiology, 1 Yersin St., Hanoi, Viet Nam, Telephone: +84 915455434, Email: trungepi@gmail.com

Dr DANG Thi Thanh Huyen, Staff, National EPI Office, National Institute of Hygiene and Epidemiology, 1 Yersin St., Hanoi, Viet Nam, Telephone: +84 915455434, Email: epi.huyen1@gmail.com

PROGRAM FOR APPROPRIATE TECHNOLOGY IN HEALTH (PATH)

Dr HUONG Vu Minh, Regional Technical Advisor, Center for Vaccine Innovation and Access (CVIA), Programme for Appropriate Technology in Health, 49 Hai Ba Trung Street, Hoan Kiem, Hanoi, Viet Nam, Email: hvu@path.org
Dr DUNG Tham Chi, Senior Regional Programme Officer, Programme for Appropriate Technology in Health, 49 Hai Ba Trung Street, Hoan Kiem, Hanoi, Viet Nam, Email: dtham@path.org

RESEARCH INSTITUTE FOR TROPICAL MEDICINE (RITM), PHILIPPINES

Dr Lea Necitas G. APOSTOL, Supervising Science Research Specialist, Department of Virology, Research Institute for Tropical Medicine, 9002 Research Drive, Filinvest Corporate City, Alabang, Muntinlupa City, Philippines, Telephone: 632 809 7120, Email: leianecitas9780@yahoo.com

Ms Leonibel A. REYES, Senior Science Research Specialist, Department of Virology, Research Institute for Tropical Medicine, 9002 Research Drive, Filinvest Corporate City, Alabang, Muntinlupa City, Philippines, Telephone: 632 809 7120, Email: leonibel_agajona@yahoo.com

ROTARY INTERNATIONAL POLIOPLUS

Ms Mary Anne Alcordo SOLOMON, End Polio Now Coordinator EPNC Zone 10 A, Philippines, Telephone: 63 917 320 6666, Email: meannesolomon@gmail.com

Mr Rafael GARCIA III, Past RI Director, EPNC Zone 10 A, Philippines, Telephone: 63 917 518 0770, Email: rafaelgarciaiii@yahoo.com

Mr Daumon Guiller TUMANGAN, Past RI Director, EPNC Zone 10 A, Philippines, Telephone: 63 917 526 8418, Email: guillerrid.3830@gmail.com

Mr Ernest YUYEK, Deputy End Polio Plus Coordinator, EPNC Zone 10 A, Philippines, Telephone: 63 917 572 6933, Email: ernestodyuyek@gmail.com

Mr Enrique ANDRES, Secretariat/District Polio Coordinator, EPNC Zone 10 A, Philippines, Telephone: 63 917 109 1318, Email: rikidapogi@yahoo.com

ST MARIANNA UNIVERSITY SCHOOL OF MEDICINE

Dr Hiroaki KITAGAWA, President, St. Marianna University, School of Medicine, 2-16-1 Sugao Miyamaeku, Kawasaki City 216 -8511, Japan, Telephone: +81 44 977 811, Fax: +81 44 975 1400, Email: h2kita@marianna-u.ac.jp, gakuchoshitsu@marianna-u.ac.jp

Dr Hiroyuki KUNISHIMA, Professor, St. Marianna University School of Medicine, 2-16-1 Sugao Miyamaeku, Kawasaki City 216 -8511, Japan, Telephone: +81 44 977 811, Fax: +81 44 976 5971, Email: h2kuni@marianna-u.ac.jp

TOKYO METROPOLITAN

Dr Yuho HORIKOSHI, Staff Physician, Tokyo Metropolitan
CHILDREN’S MEDICAL CENTER
Children’s Medical Centre, 2-8-29, Musashidai, Fuchi-shi, Tokyo 183 8561, Japan, Email: yuho74@hotmail.com

TSUCHIURA KYODO GENERAL HOSPITAL, JAPAN
Dr Atsuna MATSUMOTO, Resident Physician, Pediatric Department, Tsuchiura Kyodo General Hospital, 4 Chome 1-1 Otsono, Tsuchiura, Ibaraki 300-0028, Japan, Telephone: +81 29 830 3711, Email: atsunamat@gmail.com

UNITED STATES CENTERS FOR DISEASE CONTROL AND PREVENTION (US CDC)
Mr Gabriel ANAYA, Deputy Branch Chief, Strategic Information and Workforce Development Branch, Global Immunization Division, US Centers for Disease Control and Prevention, 1600 Clifton Road, Atlanta, Georgia 30329, United States of America, Telephone: +1 404 718 6367, Email: gda1@cdc.gov

Dr Lidia KAYEMBE, Epidemiologist, Global Immunization Division, US Centers for Disease Control and Prevention, 1600 Clifton Road, Atlanta, Georgia 30333, United States of America, Telephone: +1 404 242 8438, Fax: +1 404 235 0004, Email: yfv9@cdc.gov

Dr Jennifer KNAPP, Epidemiologist, Global Immunization Division, US Centers for Disease Control and Prevention, 1600 Clifton Road, Atlanta, Georgia 30329, United States of America, Telephone: +1 404 718 6353, Fax: +1 404 471 8542, Email: JKnapp1@cdc.gov

Dr Jaymin PATEL, Epidemiologist, Global Immunization Division/Polio Eradication Branch, US Centers for Disease Control and Prevention, 1600 Clifton Road, Atlanta, Georgia 30333, United States of America, Telephone: +1 404 376 9741, Email: isr0@cdc.gov

UNICEF EAST ASIA AND PACIFIC REGIONAL OFFICE (EAPRO)
Dr Khin Devi AUNG, Regional Health Specialist, Immunization and Health Systems, UNICEF East Asia and Pacific Regional Office, #19 Phra Atit Road, Phra Nakorn, Bangkok, 10200, Thailand, Telephone: +66 2356 9257, Email: kdaung@unicef.org

Dr Ridwan GUSTIANA, Regional Health Specialist, Immunization and Health Emergencies, UNICEF East Asia and Pacific Regional Office, #19 Phra Atit Road, Phra Nakorn, Bangkok, 10200, Thailand, Email: rgustiana@unicef.org

UNICEF CAMBODIA
Dr Rathmony HONG, Health Specialist, Child Survival and Development, Integrated Early Childhood Development, UNICEF Cambodia, #19-20 Exchange Square Bld., St. 106, Sangkat Wat Phnom, Khann Doun Penh, Phnom Penh, Cambodia, Telephone: +855 1688 5886, Email: rhong@unicef.org

Ms Lenin VONG, Health Officer, Health and Nutrition, UNICEF Cambodia, #19-20 Exchange Square Bld., St. 106, Sangkat Wat
Phnom, Khann Daun Penh, Phnom Penh, Cambodia,
Telephone: +855 8976 6567, Email: Ivong@unicef.org

**UNICEF MONGOLIA**
Dr Bataa CHULUUNBAATAR, Health Specialist, Programme team, UNICEF Mongolia, UN House, United Nations Street-14, Ulaanbaatar 14201 Mongolia, Telephone: +976 9908 6650, Fax: +976 1132 7313, Email: bchuluunbaatar@unicef.org

Dr Tsogtbaatar BYAMBA, Senior Advisor, Immunization Team, UNICEF Mongolia, UN House, United Nations Street-14, Ulaanbaatar 14201 Mongolia, Telephone: +976 9911 4967, Fax: +976 1132 7313, Email: tbyambaa@unicef.org

**UNICEF LAO PEOPLE'S DEMOCRATIC REPUBLIC**
Ms Beate DASTEL, Acting Representative, UNICEF Lao, Watnak Village, Vientiane, Lao People's Democratic Republic, Telephone: +85620 5552 1483, Fax No: +85621 31 4852, Email: bdastel@unicef.org

Dr Hendrikus RAAIJMAKERS, Chief of Health and Nutrition, UNICEF Lao, Watnak Village, Vientiane, Lao People's Democratic Republic, Telephone: +85620 5236 5655, Email: hraaijmakers@unicef.org

Dr Shukhrat RAKHIMDJANOV, Health Specialist, UNICEF Lao, Watnak Village, Vientiane, Lao People's Democratic Republic, Telephone: +85620 5731 2253, Email: srakhimdjanov@unicef.org

**UNICEF PACIFIC**
Dr Ataur RAHMAN, Maternal and Child Health Specialist, Child Survival and Development, UNICEF Pacific, Private Mail Bag, Suva, Republic of Fiji, Telephone: +679 3300439, Email: atrahman@unicef.org

Dr Maung Maung YE ZIN ZIN, Immunization Specialist, Child Survival and Development, UNICEF Pacific, Private Mail Bag, Suva, Republic of Fiji, Telephone: +679 3300439, Email: myezinzin@unicef.org

**UNICEF PHILIPPINES**
Dr Carla OROZCO, Immunization Specialist, Health and Nutrition – Manila Office, UNICEF Philippines, 14th Floor Rockwell Business Center, Sheridan St corner United Street, Highway Hills, Mandaluyong City 1550, Philippines, Telephone: +63 2 8249 5428, Email: corozco@unicef.org

Dr Madonna ANABIEZA, Health Specialist, Health and Nutrition Mindanao Field Office, Cotabato City, Philippines, Telephone: +64 421 7047, Email: manabieza@unicef.org
Dr Catherine LOZARITO, Health Officer, Health and Nutrition – Mindanao Field Office, Cotabato City, Philippines, Telephone: +63 917 626 2030, Email: clozarito@unicef.org

Engr Bernardo BERSOLA, Procurement Services Officer, Health and Nutrition – Manila Office, UNICEF Philippines, 14th Floor Rockwell Business Center, Sheridan St corner United Street, Highway Hills, Mandaluyong City 1550, Philippines, Telephone: +63 2 8249 5428, Email: bbersola@unicef.org

Ms Kathleen SOLIS, C4D Specialist, Health and Nutrition – Manila Office, UNICEF Philippines, 14th Floor Rockwell Business Center, Sheridan St corner United Street, Highway Hills, Mandaluyong City 1550, Philippines, Telephone: +63 2 8249 5428, Email: ksolis@unicef.org

**UNICEF VIET NAM**

Dr NGUYEN Huy Du, MCH Specialist, Child Survival and Development, UNICEF Viet Nam, 304 Kim Ma, Ba Dinh, Hanoi, Viet Nam, Telephone: +84 24 3850 0211, Email: nhdu@unicef.org

Dr NGUYEN Van Cuong, Consultant, COVID-19 vaccination, Child Survival and Development, UNICEF Viet Nam, 304 Kim Ma, Ba Dinh, Hanoi, Viet Nam, Telephone: +849 1534 2223, Email: vnguyen@unicef.org

**4. SECRETARIAT**

**WHO REGIONAL OFFICE FOR THE WESTERN PACIFIC**

Dr Yoshihiro TAKASHIMA, Coordinator, Vaccine-Preventable Diseases and Immunization, World Health Organization, Regional Office for the Western Pacific, United Nations Avenue corner Taft Avenue, Manila, 1000 Philippines, Telephone: +632 8528 9746, Email: takashimay@who.int

Ms Varja GRABOVAC, Scientist, Vaccine-Preventable Diseases and Immunization, World Health Organization, Regional Office for the Western Pacific, United Nations Avenue corner Taft Avenue, Manila, 1000 Philippines, Telephone: +632 8528 9747, Email: grabovavc@who.int

Dr Ananda AMARASINGHE, Technical Officer, Vaccine-Preventable Diseases and Immunization, World Health Organization, Regional Office for the Western Pacific, United Nations Avenue corner Taft Avenue, Manila, 1000 Philippines, Telephone: +632 8528 9032, Email: amarasinghe@who.int

Dr Tigran AVAGYAN, Technical Officer, Vaccine-Preventable Diseases and Immunization, World Health Organization, Regional Office for the Western Pacific, United Nations Avenue corner Taft Avenue, Manila, 1000 Philippines,
Telephone: +632 8528 9737, Email: avagyant@who.int

**Dr Nyambat BATMUNKH**, Technical Officer, Vaccine-Preventable Diseases and Immunization, World Health Organization, Regional Office for the Western Pacific, United Nations Avenue corner Taft Avenue, Manila, 1000 Philippines, Telephone: +632 8528 9741, Email: batmunkhn@who.int

**Ms Analisa BAUTISTA**, Technical Officer, Vaccine-Preventable Diseases and Immunization, World Health Organization, Regional Office for the Western Pacific, United Nations Avenue corner Taft Avenue, Manila, 1000 Philippines, Telephone: +632 8528 9025, Email: bautistaa@who.int

**Dr Roger EVANS**, Laboratory Virologist, Vaccine-Preventable Diseases and Immunization, World Health Organization, Regional Office for the Western Pacific, United Nations Avenue corner Taft Avenue, Manila, 1000 Philippines, Telephone: +632 8528 9704, Email: revans@who.int

**Dr SweetC ALIPON**, Consultant, Vaccine-Preventable Diseases and Immunization, World Health Organization, Regional Office for the Western Pacific, United Nations Avenue corner Taft Avenue, Manila, 1000 Philippines, Telephone: +632 8528 9034, Email: alipons@who.int

**Dr Gemma ARELLANO**, Consultant, Vaccine-Preventable Diseases and Immunization, World Health Organization, Regional Office for the Western Pacific, United Nations Avenue corner Taft Avenue, Manila, 1000 Philippines, Email: arellanog@who.int

**Dr Syeda Kanwal ASLAM**, Consultant, Vaccine-Preventable Diseases and Immunization, World Health Organization, Regional Office for the Western Pacific, United Nations Avenue corner Taft Avenue, Manila, 1000 Philippines, Telephone: +632 8528 9018, Email: saslam@who.int

**Dr Heeyoun CHO**, Consultant, Vaccine-Preventable Diseases and Immunization, World Health Organization, Regional Office for the Western Pacific, United Nations Avenue corner Taft Avenue, Manila, 1000 Philippines, Telephone: +632 8528 9740, Email: hcho@who.int

**Ms Glenda GONZALES**, Consultant, Vaccine-Preventable Diseases and Immunization, World Health Organization, Regional Office for the Western Pacific, United Nations Avenue corner Taft Avenue, Manila, 1000 Philippines, Telephone: +632 8528 9721, Email: gonzalesg@who.int

**Dr Masamitsu TAKAMATSU**, Consultant, Vaccine-Preventable Diseases and Immunization, World Health Organization, Regional Office for the Western Pacific, United Nations Avenue corner Taft Avenue, Manila, 1000 Philippines, Telephone: +632 8528 9704, Email: takamatsum@who.int
Ms Angel Grace ZORILLA, Consultant, Vaccine-Preventable Diseases and Immunization, World Health Organization, Regional Office for the Western Pacific, United Nations Avenue corner Taft Avenue, Manila, 1000 Philippines, Email: zorillaa@who.int

Dr Babatunde OLOWOKURE, Director, WHO Health Emergencies Programme, World Health Organization, Regional Office for the Western Pacific, United Nations Avenue corner Taft Avenue, Manila, 1000 Philippines, Email: olowokureb@who.int

Dr Socorro ESCALANTE, Coordinator, Essential Medicines and Health Technologies, World Health Organization, Regional Office for the Western Pacific, United Nations Avenue corner Taft Avenue, Manila, 1000 Philippines, Telephone: +63 2 8 5289846, Email: escalantess@who.int

WHO CAMBODIA
Dr Md Shafiqul HOSSAIN, Technical Officer, Vaccine-Preventable Diseases and Immunization, WHO Representative Office in Cambodia, No. 61-64, Preah Norodom Blvd. (corner Street 306), Sangkat Boeung Keng Kang I, Khan Chamkamorn, Phnom Penh, Telephone: +855 23 81011, Email: hossains@who.int

Dr CHHAM Samnang, National Professional Officer, Measles and Elimination High Risk Communities, WHO Representative Office in Cambodia, No. 61-64, Preah Norodom Blvd. (corner Street 306), Sangkat Boeung Keng Kang I, Khan Chamkamorn, Phnom Penh, Telephone: +855 23 81048, Email: chhams@who.int

WHO CHINA
Dr Robert KEZAALA, Vaccine-Preventable Diseases and Immunization WHO Representative Office in China, 401, Dongwai Diplomatic Office Building, 23, Dongzhimenwai Dajie, Chaoyang District, Beijing 100600, Telephone: +8610 6532 7190, Email: kezaalar@who.int

Dr ZUO Shuyan, National Professional Officer, Vaccine-Preventable Diseases and Immunization WHO Representative Office in China, 401, Dongwai Diplomatic Office Building, 23, Dongzhimenwai Dajie, Chaoyang District, Beijing 100600, Telephone: +8610 6532 7190, Email: zuos@who.int

WHO KIRIBATI
Dr Wendy Dawn SNOWDON, Country Liaison Officer, WHO Office in Kiribati, Bikenibeu, Tarawa, Telephone: +686 28231, Email: snowdonw@who.int

WHO LAO PEOPLE’S DEMOCRATIC REPUBLIC
Dr Lauren FRANZEL-SASSANPOUR, Technical Officer, Vaccine-Preventable Diseases and Immunization, WHO Representative Office in the Lao People’s, Democratic Republic, 125 Saphanthong Road, Unit 5, Ban Saphangthongtai, Sisattanak District, Vientiane, Email: franzell@who.int
WHO MALAYSIA
Dr Fina Hidayati TAMS, Consultant, WHO Representative Office in Malaysia, Brunei Darussalam and Singapore, 4th Floor, Prima 8, Block 3508, Jalan Teknokrat 6, 63000 Cyberjaya, Selangor, Email: tamsf@who.int

WHO FEDERATED STATES OF MICRONESIA
Dr Ben Jackson AMOR JR., Technical Officer, WHO Office in Northern Micronesia, The Federated States of Micronesia National Government, Department of Health and Social Affairs, 1st Floor Mogethin Building, National Capital Complex, Palikir, Pohnpei, Email: amorb@who.int

WHO MONGOLIA
Dr Anuzaya PUREVDAGVA, Technical Officer, Vaccine-Preventable Diseases and Immunization, WHO Representative Office in Mongolia, Ministry of Health, Government Building No. 8, Ulaanbaatar, Email: purevdagvaa@who.int

WHO PAPUA NEW GUINEA
Dr Deborah BETTELS, Medical Officer, Vaccine-Preventable Diseases and Immunization, WHO Representative Office in Papua New Guinea, 4th Floor, AOPI CENTRE, Waigani Drive, Port Moresby, Telephone: +675 3257827, Email: bettelsd@who.int
Dr Dessie MEKONNEN, Technical Officer, Vaccine-Preventable Diseases and Immunization, WHO Representative Office in Papua New Guinea, 4th Floor, AOPI CENTRE, Waigani Drive, Port Moresby, Telephone: +675 3257827, Email: mekonnend@who.int

WHO PHILIPPINES
Dr WANG Xiaojun, Medical Officer, Vaccine-Preventable Diseases and Immunization, WHO Representative Office in the Philippines, Ground Floor, Building 3, Department of Health, San Lazaro Compound, Rizal Avenue, Sta. Cruz, Manila, Telephone: +632 528 9062, Email: wangxia@who.int
Dr Achyut SHRESTHA, Technical Officer, Vaccine-Preventable Diseases and Immunization, WHO Representative Office in the Philippines, Ground Floor, Building 3, Department of Health, San Lazaro Compound, Rizal Avenue, Sta. Cruz, Manila, Telephone: +63 2 528 9065, Email: shresthaa@who.int

WHO SAMOA
Dr Lepaitai Blanche HANSELL, National Professional Officer, WHO Representative Office in Samoa, American Samoa, Cook Islands, Niue and Tokelau, Ioane Viliamu Building, Beach Road, Apia, Email: hanselll@who.int

WHO SOLOMON ISLANDS
Dr Simon BURGGRAAF, Technical Officer, WHO Representative Office in Solomon Islands, Ministry of Health Building, Chinatown, Honiara, Email: burggraafs@who.int

WHO SOUTH PACIFIC
Dr Jayaprakash VALIAKOLLERI, Consultant, Vaccine-Preventable Diseases and Immunization, WHO Representative Office in the South Pacific, Level 4 Provident Plaza One, Downtown Boulevard, 33 Ellery Street, Suva, Fiji, E-mail: valiakollerij@who.int
WHO TONGA

Dr Yutaro SETOYA, Technical Officer, WHO Office in Tonga, Ministry of Health, Nuku’ alofa, Email: setoyay@who.int

WHO VANUATU

Dr Philippe GUYANT, Medical Officer, WHO Representative Office in Vanuatu, MOH Iatika Complex, P.O. Box 177, Port Vila, Email: guyantp@who.int

WHO VIET NAM

Dr Makiko IIJIMA, Technical Officer, Vaccine-Preventable Diseases and Immunization, WHO Representative Office in Viet Nam, 304 Kim Ma Street, Hanoi, E-mail: iijimam@who.int

WHO HEADQUARTERS

Dr Natasha CROWCROFT, Senior Technical Adviser, Measles and Rubella Control, World Health Organization, Avenue Appia 20, 1211 Geneva 27, Switzerland, Telephone: +41 22 791 4373, Email: crowcroftn@who.int

Dr Ann LINDSTRAND, Coordinator, Essential Programme on Immunization, World Health Organization, Avenue Appia 20, 1211 Geneva 27, Switzerland, Telephone: +41 22 791 3436, Email: lindstranda@who.int
PROGRAMME OF ACTIVITIES

**Day 1 – Tuesday, 22 June 2021**

08:00 – 08:25  **1. OPENING SESSION**

- Welcome remarks by the Responsible Officer
- Opening remarks of the Regional Director
- Self-introduction, Election of Officers
- Administrative announcements

08:25 – 08:30  **Group photo**

08:30 – 08:40  **1.1 Meeting objectives and programme overview**  Dr Yoshihiro Takashima

08:40 – 08:50  **Group photo**

08:50 – 09:00  **1.2 Stakeholders’ perspectives**  Dr Yoshihiro Takashima

09:00 – 09:15  **1.3 Setting the stage for the meeting**  Dr Yoshihiro Takashima

09:15 – 09:30  **1.4 Meeting agenda**  Dr Yoshihiro Takashima

09:30 – 09:45  **1.5 Programme overview**  Dr Yoshihiro Takashima

09:45 – 10:00  **1.6 The burden of vaccine-preventable diseases in the Western Pacific Region**  Dr Yoshihiro Takashima

10:00 – 10:15  **1.7 The contribution of vaccines to health and development**  Dr Yoshihiro Takashima

10:15 – 10:30  **1.8 Rounding off the meeting**  Dr Yoshihiro Takashima

10:30 – 10:45  **Group photo**

10:45 – 11:00  **Lunch break**

11:00 – 11:15  **2. IMMUNIZING THE WESTERN PACIFIC REGION**

11:15 – 11:30  **2.1 Contributing to development**  Dr Yoshihiro Takashima

11:30 – 11:45  **2.2 Global child health**  Dr Yoshihiro Takashima

11:45 – 12:00  **2.3 Sustainable development goals**  Dr Yoshihiro Takashima

12:00 – 13:00  **Lunch break**

13:00 – 13:15  **3. FUNCTIONALITY OF THE TECHNICAL ADVISORY GROUP**

13:15 – 13:30  **3.1 Current and future priorities**  Dr Yoshihiro Takashima

13:30 – 13:45  **3.2 Considerations for the new strategic plan**  Dr Yoshihiro Takashima

13:45 – 14:00  **3.3 Capacity building programmes**  Dr Yoshihiro Takashima

14:00 – 14:15  **3.4 Review of the meeting**  Dr Yoshihiro Takashima

14:15 – 14:30  **3.5 Group photo**

14:30 – 14:45  **3.6 Closing remarks**  Dr Yoshihiro Takashima

14:45 – 15:00  **The meeting adjourns**

**Day 2 – Wednesday, 23 June 2021**

08:00 – 08:15  **4. ADDRESSING THE GAPS IN THE IMMUNIZATION PROGRAMME**

08:15 – 08:30  **4.1 Setting the agenda**  Dr Yoshihiro Takashima

08:30 – 08:45  **4.2 Presentation of the gaps in the immunization programme**  Dr Yoshihiro Takashima

08:45 – 09:00  **4.3 Discussion**  Dr Yoshihiro Takashima

09:00 – 09:15  **4.4 Prevention of vaccine-preventable diseases**  Dr Yoshihiro Takashima

09:15 – 09:30  **4.5 Update on the strengthening of vaccine cold chain management and logistics in the Western Pacific Region**  Dr Yoshihiro Takashima

09:30 – 09:45  **4.6 Discussion**  Dr Yoshihiro Takashima

09:45 – 10:00  **4.7 Strengthening of monitoring and evaluation of vaccination coverage**  Dr Yoshihiro Takashima

10:00 – 10:15  **4.8 Discussion**  Dr Yoshihiro Takashima

10:15 – 10:30  **4.9 Preventing the introduction of vaccine-preventable diseases from the importation of goods and people**  Dr Yoshihiro Takashima

10:30 – 10:45  **4.10 Discussion**  Dr Yoshihiro Takashima

10:45 – 11:00  **4.11 Revaccination and catch-up vaccination**  Dr Yoshihiro Takashima

11:00 – 11:15  **4.12 Discussion**  Dr Yoshihiro Takashima

11:15 – 11:30  **4.13 Strengthening the surveillance of vaccine-preventable diseases**  Dr Yoshihiro Takashima

11:30 – 11:45  **4.14 Discussion**  Dr Yoshihiro Takashima

11:45 – 12:00  **4.15 National vaccination coverage surveys and reporting**  Dr Yoshihiro Takashima

12:00 – 13:00  **Lunch break**

13:00 – 13:15  **5. CONSIDERATIONS FOR THE FUTURE**

13:15 – 13:30  **5.1 Setting the agenda**  Dr Yoshihiro Takashima

13:30 – 13:45  **5.2 Economic considerations**  Dr Yoshihiro Takashima

13:45 – 14:00  **5.3 Current status of the National Immunization Programme**  Dr Yoshihiro Takashima

14:00 – 14:15  **5.4 Discussion**  Dr Yoshihiro Takashima
2. GLOBAL UPDATES

08:40 – 09:00  **2.1 Immunization Agenda 2030**  Dr Ann Lindstrand  
               IVB/HQ

09:00 – 09:15  Discussion

09:15 – 09:35  **2.2 Vaccination Response to COVID-19 Pandemic**  Dr Ann Lindstrand  
               IVB/HQ

09:35 – 09:50  Discussion

09:50 – 10:10  *Coffee break*

3. VACCINATION RESPONSE TO COVID-19 PANDEMIC IN THE WESTERN PACIFIC REGION

10:10 – 10:30  **3.1 COVID-19 in the Western Pacific Region**  Dr B. Olowokure  
               WHE/WPRO

10:30 – 10:50  **3.2 Access and availability of COVID-19 vaccines**

10:50 – 11:00  **3.2.1 Global update**  Dr Socorro Escalante  
               EMT/WPRO

11:10 – 11:30  Discussion

11:30 – 11:50  **3.3 Vaccine deployment and vaccination**

11:50 – 12:00  Discussion

**Day 2 – Wednesday, 23 June 2021**

3.4 Vaccine and immunization safety

3.4.1 Country experience
<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Speaker</th>
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<tbody>
<tr>
<td>08:45 – 09:00</td>
<td>Republic of Korea</td>
<td>Dr Yeon-kyeng Lee</td>
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<td>09:00 – 09:15</td>
<td>Australia</td>
<td>Dr Susan Trainor Adj A/Prof Michael</td>
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<td>09:15 – 09:30</td>
<td>3.4.2 Regional overview</td>
<td>Dr Ananda</td>
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<td>3.5 Monitoring and evaluation of vaccination response to COVID-19 in</td>
<td>Ms Glenda Gonzales</td>
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<td>the Western Pacific Region</td>
<td>VDI/WPRO</td>
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<td>09:45 – 10:00</td>
<td>Coffee break</td>
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<td>10:00 – 10:15</td>
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<td>10:15 – 10:25</td>
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<td>4. MEASLES AND RUBELLA ELIMINATION IN THE WESTERN PACIFIC REGION</td>
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<td>4.1 Experiences and progress of countries in the Region</td>
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<td>4.1.1 Measles and rubella elimination country experience</td>
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<td>10:25 – 10:40</td>
<td>China</td>
<td>Dr Li Yuanqiu</td>
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<td>10:40 – 10:55</td>
<td>Philippines</td>
<td>Ms Gretchen Esole</td>
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<td></td>
<td>4.2 Regional update on measles and rubella elimination</td>
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<td>10:55 – 11:05</td>
<td>4.2.1 Expanding measles and rubella laboratory network/support</td>
<td>Dr Roger Evans</td>
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<td>(Philippines and Pacific island countries and areas)</td>
<td>VDI/WPRO</td>
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<td>11:10 – 11:20</td>
<td>Discussion</td>
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<td>11:20 – 11:35</td>
<td>4.2.2 Regional overview of measles and rubella elimination in the</td>
<td>Dr Syeda Aslam</td>
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<td>Western Pacific: evaluation on implementation and impact of Regional</td>
<td>VDI/WPRO</td>
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<td>Strategy (and Plan of Action including review of progress towards</td>
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<td>and achievements of &quot;Operational Targets by 2020&quot;)</td>
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<td>11:35 – 11:50</td>
<td>4.3 Global update on measles &amp; rubella elimination</td>
<td>Dr Natasha</td>
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<td>Measles &amp; rubella elimination amid COVID-19 Pandemic: global update</td>
<td>IVB/HQ</td>
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<td>(including introduction to (i) Measles and Rubella Strategic</td>
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<td>Framework: 2021-2030 and (ii) Measles Outbreaks Strategic Response</td>
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<td>Plan: 2021-23) and updates on other Regions</td>
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<td>11:50 – 12:00</td>
<td>Discussion</td>
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Day 3 – Thursday, 24 June 2021

08:00 – 08:20  
**4.4 9th Meeting of the Regional Verification Commission**  
Prof David Durrheim  
for Measles and Rubella Elimination in the Western Pacific conclusions and recommendations  
RVC Chair

08:20 – 08:30  
Discussion

5. RESPONSE TO, PREVENTION OF AND PREPAREDNESS FOR EMERGENCE AND CIRCULATION OF VACCINE-DERIVED POLIOVIRUS (VDPV)

08:30 – 08:45  
**5.1 Update on Global Polio Eradication Initiative**  
Dr Aidan O'Leary POL/HQ

5.2 cVDPV in the Western Pacific Region

5.2.1 Update of cVDPV outbreaks (type 1 and type 2)

08:45 – 09:00  
– Malaysia  
Dr Jamiatul Aida Md. Sani

09:00 – 09:15  
– Philippines  
Dr Kim Patrick Tejano

09:15 – 09:30  
**5.2.2 Post mOPV2-SIA VDPV2 in the Philippines**  
Dr SweetC Alipon VDI/WPRO

09:30 – 09:45  
**5.2.3 Prevention of and preparedness for cVDPV in the Western Pacific**  
Dr Tigran Avagyan VDI/WPRO

09:45 – 10:00  
Discussion

10:00 – 10:15  
Coffee break

6. IMPLEMENTATION OF REGIONAL STRATEGIC FRAMEWORK FOR VPDs AND IMMUNIZATION IN THE WESTERN PACIFIC 2021-2030 AMID THE COVID-19 PANDEMIC

10:15 – 10:25  
**6.1 Regional overview**  
Dr Yoshihiro Takashima  
VDI/WPRO

6.2 Country experience

10:25 – 10:40  
– Lao People's Democratic Republic  
Dr C. Patthammavong

10:40 – 10:55  
– Cambodia  
Mr Ork Vichit

10:55 – 11:10  
**6.3 New VPDs for accelerated control towards 2030**  
Dr Tigran Avagyan VDI/WPRO

– Hepatitis A
11:10 – 11:25  **6.4** New VPDs for accelerated control towards 2030
- Rabies  
  Dr Aya Yajima  
  MTD/WPRO

11:25 – 11:35  Discussion

11:35 – 11:50  **6.5** Regional Strategic Framework for Vaccine-Preventable Diseases and Immunization in the Western Pacific 2021-2030 amid the COVID-19 Pandemic  
  Dr Yoshihiro Takashima  
  VDI/WPRO

11:50 – 12:00  Discussion

**Day 4 – Friday, 25 June 2021**

**7. WORKING WITH IMMUNIZATION PARTNERS**

08:00 – 10:00  **7.1** Partners' Presentation

10:00 – 10:30  **Coffee break**
8. TAG CONCLUSIONS AND RECOMMENDATIONS

9. CLOSING SESSION