The Fourteenth Bi-Regional Meeting of national influenza centres and influenza surveillance in the WHO South-East Asia and Western Pacific regions took place virtually on 16–18 August 2021.

Participants included representatives from Member States, advisers, observers, staff of the World Health Organization’s headquarters, two regional offices and country offices, and experts from WHO collaborating centres and partner agencies.

A number of recommendations were identified. This report describes the proceedings of the meeting sessions, outlines the participant discussions on the three underlying themes and lists the recommendations for Member States, the WHO Secretariat and partner agencies.
14th Bi-Regional Meeting of National Influenza Centres (NICs) and Influenza Surveillance in the WHO South-East Asia and Western Pacific Regions

Virtual meeting

New Delhi, India, 17–19 August 2021

Report of the meeting
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Note to readers

This report has been prepared by the World Health Organization’s Regional Offices for South-East Asia and the Western Pacific for Member States of the South-East Asia and Western Pacific regions and for those who participated in the Fourteenth Bi-regional Meeting of national influenza centres and influenza surveillance in the Western Pacific and South-East Asia regions virtually on 17–19 August 2021.

The views expressed in this report are those of the participants and do not necessarily reflect the policies or opinions of the WHO Regional Offices for South-East Asia and the Western Pacific.
Screenshots from various sessions of the meeting (Photo credit: WHO-SEARO)
List of acronyms

APSED  Asia-Pacific Strategy for Emerging Diseases and Public Health Emergencies
COVID-19  Coronavirus disease 2019
EQAP  external quality assessment programme
FAO  Food and Agriculture Organization of the United Nations
GISAID  Global Initiative on Sharing Avian Influenza Data
GISRS  Global Influenza Surveillance and Response System
ILI  influenza-like illness
NIC  national influenza centre
PCR  polymerase chain reaction
PPE  personal protective equipment
SARI  severe acute respiratory illness
SARS-CoV-2  severe acute respiratory syndrome coronavirus 2
SEARO  (WHO) Regional Office for South-East Asia
WHO  World Health Organization
WHO CC  WHO collaborating centre
WHO-WPRO  WHO Regional Office for the Western Pacific
Summary

The Fourteenth Biregional Meeting of national influenza centres and influenza surveillance in the WHO Western Pacific and South-East Asia Regions took place virtually, as a result of the ongoing pandemic, on 17-19 August 2021.

The objectives of the meeting were:

(1) to review the influenza trends observed in the WHO South-East Asia and Western Pacific Regions between January 2020 and August 2021, including trends of circulation of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) with influenza;

(2) to review influenza-like illness (ILI) and severe acute respiratory infection (SARI) surveillance (epidemiology and laboratory) and identify challenges experienced in the context of COVID-19 in the Western Pacific and South-East Asia Regions for further surveillance system strengthening;

(3) to identify and agree on key priority activities for integrating sentinel surveillance for influenza and SARS-CoV-2 in line with the WHO interim guidance on “Maintaining surveillance of influenza and monitoring SARS-CoV-2: adapting Global Influenza Surveillance and Response System (GISRS) and sentinel systems during the COVID-19 pandemic”;

(4) to identify approaches for accelerated strengthening of laboratory systems, using experiences from COVID-19, towards preparation for outbreaks of influenza and other respiratory viral infections with epidemic and pandemic potential in the future; and

(5) to discuss COVID-19 pandemic vaccine deployment readiness assessments, the deployment planning and implementation experience, and how it can be used for shaping pandemic influenza vaccine deployments in the future.

A total of 152 participants attended, including 64 (38 from the WHO Western Pacific Region and 26 from the South-East Asia Region) from 14 Member States of the Western Pacific Region and nine Member States from the South East Asia Region. Also in attendance were four temporary advisers, 24 observers and 60 members of the World Health Organization’s Secretariat representing headquarters, two regional offices and several country offices. The meeting featured seven plenary sessions and one breakout session.

Member States, WHO and partners recognized that seasonal influenza continues to cause significant morbidity and mortality globally and pandemic influenza remains one of the greatest threats to global health security.

Since the beginning of the pandemic, countries in Asia and the Pacific have successfully responded to the transmission of SARS-CoV-2 while sustaining influenza surveillance, albeit with some challenges. Health systems and processes, built and strengthened under pandemic influenza preparedness, have been the foundation for the COVID-19 response in the countries and have proven their utility and adaptability during the pandemic. The laboratory capacity for COVID-19 diagnosis was rapidly enhanced, using national influenza centres
(NICs) and other influenza diagnostic laboratories, and resources and infrastructure related to GISRS in the countries were repurposed.

While there has been a significant decrease in seasonal influenza virus circulation since the first quarter of 2020, it is postulated that it will re-emerge as countries begin to relax international travel restrictions. Cocirculation of influenza and SARS-CoV-2 has the potential to put further pressure on the already burdened health-care systems. Moreover, in the face of shifting priorities of both governments and the public, it is essential to ensure their engagement with regard to sustaining influenza surveillance systems in Member countries.

Against this background, influenza surveillance and laboratory focal points from Member States in the WHO South-East (SE) Asia and Western Pacific regions met virtually to (i) review trends of circulation of influenza with SARS-CoV-2; (ii) review influenza-like illness and severe acute respiratory infection surveillance and identify challenges in the context of COVID-19; (iii) identify and agree on key priority activities for integrating sentinel surveillance for influenza and SARS-CoV-2; (iv) identify approaches for accelerated strengthening of laboratory systems, using experiences from COVID-19, with a view to preparing for outbreaks of influenza and other respiratory viruses; and (v) discuss the COVID-19 pandemic vaccine deployment readiness assessments, deployment planning and implementation experience, and how it can be used for shaping pandemic influenza vaccine deployments in the future.

Updates were provided on influenza surveillance activity and reporting in the SE Asia and Western Pacific regions, and on influenza virus activity in the northern and southern hemispheres in 2020–2021. An update was also provided on the development of GISRS+, a platform that extends the well-established GISRS platform to incorporate surveillance of multiple respiratory pathogens simultaneously.

The experience of sustaining ILI and SARI surveillance during the pandemic was discussed. Representatives from Cambodia, Indonesia, Nepal, Timor-Leste and Viet Nam presented their experiences, challenges faced and lessons learned.

An overview of the utility of integrating sentinel surveillance of influenza, SARS-CoV-2 and other respiratory viruses was provided. While the particular public health questions that need answers change, depending on the stage of an epidemic or a pandemic, the objectives for both SARS-CoV-2 and influenza surveillance remain the same. As the pandemic evolves and SARS-CoV-2 virus becomes an endemic pathogen, sentinel surveillance will turn out to be the most practical, cost-effective and informative means to monitor trends of COVID-19.

The breakout session focused on prioritizing activities for integrating sentinel surveillance of influenza and SARS-CoV-2 in three areas: laboratory, surveillance and data. A similar theme was discussed across all three sessions; the pandemic has disrupted influenza surveillance and to resume or enhance influenza surveillance, countries must focus on the basics of influenza surveillance, i.e. representative sampling of ILI and SARI cases, testing the WHO minimum number of samples per week and timely reporting of quality data to FluMart – a global platform for influenza epidemiological and virological data sharing. Other priority activities highlighted in the discussions were related to capacity-building, especially in laboratory diagnosis, data management and data analysis areas.

The experiences, challenges faced, and lessons identified during the pandemic vaccine deployment were shared by representatives from Bhutan, Mongolia and the Philippines. All
three countries had a number of successes to share. While each country faced unique challenges, there were again some common themes – vaccine hesitancy, delays in vaccine acquisition and logistics and supply chain issues in delivering vaccines from national to subnational levels. The lessons learned from the pandemic vaccine deployment across Member States in the two regions were viewed as pivotal for improving and reworking influenza pandemic vaccine deployment plans.

Further updates on the pandemic vaccine deployment were shared by representatives from the WHO Regional Office for the Western Pacific (WHO-WPRO) and the WHO Regional Office for South-East Asia (WHO-SEARO). The two regional offices were involved in review of the national deployment and vaccination plans. In both regions, vaccine utilization was quite high. However, both regions have high heterogeneity with regard to vaccine coverage across countries. In both regions, there were examples of countries working together to share vaccines. This session also highlighted that there were both common and distinctly unique challenges that the countries faced to achieve high vaccine coverage against COVID-19.

In the final session of the meeting, a global update on zoonotic influenza was provided. It was highlighted that there was a great variance of zoonotic influenza subtypes detected in human infections. Experts were of the opinion that it was vital that “One Health” collaborations and platforms continue to be strengthened to mitigate the potential spillover of zoonotic influenza to humans and ensure preparedness for prompt response to influenza viruses of pandemic potential. From the animal health perspective, it was pointed out that avian influenza surveillance in Asia is well-established and it is a strong foundation for greater investment in zoonotic influenza surveillance of other animals in the Asia-Pacific region.

A number of recommendations were identified during the productive discussions in the meeting of participants from the SE Asia Region and the Western Pacific Region. First and foremost, countries are encouraged to return to the foundations of their influenza surveillance systems that have been significantly strengthened since the 2009 pandemic of influenza A(H1N1) in both regions. Countries are then encouraged to leverage experiences of the COVID-19 pandemic to further enhance influenza surveillance systems and overall pandemic influenza preparedness activities at the country level. Countries are requested to maintain the momentum gained during the COVID-19 pandemic that has resulted in enhanced capacities by continuing to engage partners and stakeholders while moving to a system that monitors influenza and SARS-CoV-2 viruses simultaneously.
1. Introduction

1.1 Meeting organization

The Fourteenth Biregional Meeting of national influenza centres and influenza surveillance in the WHO Western Pacific and South-East Asia Regions took place virtually on 17–19 August 2021.

The meeting was coordinated by the WHO Regional Office for South-East Asia in collaboration with the WHO Regional Office for the Western Pacific. A total of 152 participants attended, including 64 participants from 26 Members States (38 from the Western Pacific Region and 26 from the South-East Asia Region), four temporary advisers, 24 observers and 60 members of the World Health Organization’s Secretariat, representing headquarters, two regional offices and several country offices.

The meeting comprised seven plenary sessions and one breakout session.

The list of participants and the programme of the meeting are provided in Annexes 1 and 2 respectively.

1.2 Meeting objectives

The general objective of the meeting was to review the status of preparedness for and response to seasonal, zoonotic and pandemic influenza threats in the context of the pandemic and identify priority areas with a view to further strengthening systems based on lessons learned from the pandemic response within the overall framework of Asia Pacific Strategy for Emerging Diseases and Public Health Emergencies III (APSED-III for the implementation of the International Health Regulations (IHR) 2005 and the Global Influenza Strategy (2019–2030) in the SE Asia and Western Pacific regions.

The specific objectives of the meeting were:

1) to review influenza trends observed in the WHO South-East Asia and Western Pacific Regions between January 2020 and August 2021, including trends of circulation of SARS-CoV-2 with influenza;

2) to review influenza-like illness and severe acute respiratory infection surveillance (epidemiology and laboratory) and identify challenges experienced in the context of COVID-19 in the Western Pacific and South-East Asia Regions for further surveillance system strengthening;

3) to identify and agree on key priority activities for integrating sentinel surveillance for influenza and SARS-CoV-2 in line with the WHO interim guidance on “Maintaining surveillance of influenza and monitoring SARS-CoV-2: adapting Global Influenza Surveillance and Response System (GISRS) and sentinel systems during the COVID-19 pandemic”;
(4) to identify approaches for accelerated strengthening of laboratory systems, using experiences from COVID-19, towards preparation for outbreaks of influenza and other respiratory viral infections with epidemic and pandemic potential in the future; and

(5) to discuss the COVID-19 pandemic vaccine deployment readiness assessments, deployment planning and implementation experience, and how it can be used for shaping pandemic influenza vaccine deployments in the future.

2. Proceedings

2.1 Opening session

The meeting was opened by Dr Poonam Khetrapal Singh, Regional Director of the WHO South-East Asia Region. She delivered her opening remarks via video recording.

Dr Poonam Singh began by acknowledging the contribution of the “broader audience and stakeholders” to the COVID-19 response while being simultaneously engaged in preventive activities against existing public health threats, including seasonal influenza. She noted that influenza of pandemic potential continues to be one of the greatest threats to global health security and at the same time, cocirculation of influenza and SARS-CoV-2 has the potential to place additional strain on already over-burdened health systems.

Dr Singh then described the utility of influenza-related infrastructure and human resources in rapidly responding to the pandemic. Moreover, it was highlighted that enhanced laboratory capacity and repurposing of resources for responding to COVID-19 have led to implementation of effective interventions against the spread of SARS-CoV-2, while maintaining influenza surveillance and early warning, alert and response capacities for seasonal influenza outbreaks and influenza viruses of pandemic potential.

Dr Singh also noted that while the number of tests conducted for influenza declined during the first quarter of 2020, the overall number of tests in 2020 for the entire year was not less than the previous years. But one remarkable observation was, the number of samples shipped to WHO collaborating centres and genetic sequence data of seasonal influenza viruses reported to the Global Initiative on Sharing Avian Influenza Data (GISAID) have both significantly decreased during 2020. Against this background, she noted that this meeting would allow countries in the South-East Asia and Western Pacific Regions to share the challenges they have faced during the pandemic and the lessons learned, which are vital to help shape preparedness for future pandemics due to influenza or other infectious agents and pandemic vaccine deployments.

Dr Singh concluded her remarks by reiterating unwavering support of WHO to the ongoing COVID-19 response and to enhancing pandemic influenza preparedness and response capacity for a healthier and more health-secure Asia-Pacific.

Dr Jos Vandelaer, Regional Emergency Director of WHO-SEARO, presented the objectives, agenda and expected outcomes of the meeting.
At the conclusion of the opening session, the participants unanimously elected Dr Vivi Setiawaty as the Chair of the Fourteenth Biennial Meeting of national influenza centres and influenza surveillance in the Western Pacific and South-East Asia Regions, held virtually on 17–19 August 2021.

2.2 Plenary 1: Review of influenza trends and updates on influenza-related activities

**Moderator: Dr Kanta Subbarao, Director, WHO collaborating centre (CC), Victorian Infectious Diseases Reference Laboratory (VIDRL), The Peter Doherty Institute for Infection and Immunity, Australia**

2.2.1 An update on developments of GISRS+

*Dr Ann Moen, Chief, Influenza Preparedness and Response, WHO headquarters (HQ)*

Dr Moen provided an update on the development of the concept of GISRS+. The well-established public health capacities for influenza preparedness and response, including GISRS, have supported responses to the pandemic. Given the importance of monitoring multiple respiratory pathogens, GISRS+ is viewed as a strategic and programmatic approach to conducting integrated surveillance and monitoring of influenza, SARS-CoV-2, respiratory syncytial virus (RSV) and other respiratory viruses. It will be built upon the existing GISRS infrastructure and the network of WHO collaborating centres, essential regulatory laboratories, national influenza centres, influenza surveillance sites, data reporting and visualization platforms, external quality assurance panels and global expertise.

Dr Moen noted that this capacity-building must be performed purposefully, in a measured and sustainable way, so as to not disrupt the well-established influenza surveillance systems. She further explained that the countries would possess ownership of the implementation and expansion of GISRS to GISRS+. The process would be driven by national priorities and capacities of the Member States.

It was revealed that the roadmap for GISRS+ is currently being coordinated by WHO HQ and it would involve technical capacity-building. Technical capacity-building would be based on assessment of current GISRS capacities, gaps and identification of opportunities, goals and priorities of the Member States. Dr Moen concluded that the significant contributions of GISRS to the COVID-19 response emphasized the utility of integrating additional pathogens of epidemic and pandemic potential into the existing mechanism of GISRS.

2.2.2 Influenza trends and activities in the SE Asia Region and the Western Pacific Region

*Mr Francis Inbanathan, Technical Officer (Laboratory), WHE, WHO-SEARO*

Mr Inbanathan presented the trends and activities of seasonal influenza in the SE Asia Region and the Western Pacific Region in 2020 and 2021.
In the SE Asia Region, there was a major reduction in the number of ILI cases reported to the WHO FluMart in 2020 and 2021. In contrast, the number of SARI cases reported to the WHO global data-sharing platform remained mostly stable. This is likely to be due to the repurposing of many SARI sentinel surveillance sites to COVID-19 monitoring units. It was highlighted that the number of specimens processed for influenza testing declined after March 2020.

Mr Inbanathan concluded that this decline could have resulted after many laboratories involved in influenza diagnosis, including national influenza centres, were repurposed for the COVID-19 response. However, from mid-May 2020, this number started to rise again after WHO-SEARO orchestrated bilateral engagements to strengthen influenza surveillance with its Member States. While the reported influenza activity was significantly low, there were small peaks of influenza A(H3N2) as well as influenza B activity in one country in the Region.

Among other activities conducted in the SE Asia Region during this period, according to the presentation of Mr Inbanathan, included demonstration projects for expediting integrated influenza and SARS-CoV-2 surveillance, RSV pilot projects, roll-out of multiplex kits for testing specimens for influenza and SARS-CoV-2, and development of a regional strategy for genomic sequencing of viruses, including influenza.

In the Western Pacific Region, there was no major change in the number of specimens processed for influenza testing. However, there was a significant reduction in the influenza positivity rate. This is likely to be attributable to public health and social measures (PHSM) introduced for COVID-19. He stated that recently, there was an increase in influenza B activity in the People’s Republic of China. The first human case of avian influenza H10N3 was also reported in that country. Among other notable activities, the genomic sequencing capacity of NIC was leveraged for providing technical support to conduct genomic sequencing for COVID-19 response. The roll-out of multiplex kits has also been continued in the Western Pacific Region.

Mr Inbanathan concluded his presentation by informing the participants that all countries across both regions took part in the global, combined influenza/SARS-CoV-2 external quality assurance programme (EQAP).

2.2.3 Influenza activity in the Northern Hemisphere

Dr Hideki Hasegawa, Director, WHO collaborating centre, National Institute of Infectious Diseases, Japan

Dr Hasegawa summarized the influenza activity in the Northern Hemisphere during the 2019/20 and 2020/21 seasons. At the beginning of the 2019/20 season, there was cocirculation of influenza A(H3N2), influenza A(H1N1) pdm09 and influenza B, but this declined from Week 6 of 2020 after the emergence of SARS-CoV-2. The activity has remained low until now. Influenza circulation has re-emerged at low levels, with distribution of type and subtype dependent on the geographical region of seasonal influenza transmission. In eastern Asia, influenza B/Victoria has predominated; in South-East Asia, influenza A(H3N2) predominated initially but is now cocirculating with B/Victoria; in South Asia, influenza A(H3N2) and influenza B/Victoria are cocirculating; and in West Africa, influenza A(H1N1) pdm09 is predominant.
The majority of A(H1N1) pdm09 viruses circulating are of the 6B.1A subclade 5A1, with a minority of subclade 5A2 viruses. The majority of the subclade of 5A1 viruses is well recognized by antisera raised against the 2020/21 Northern Hemisphere egg and cell vaccine strains (A/Guangdon-Maonan/SWL1536/2019-like and A/Hawaii/70/2019-like respectively), but are poorly recognized by the 2021 Southern Hemisphere vaccine strains (A/Wisconsin/588/2019-like and A/Victoria/2570/2019-like).

He informed the participants that the majority of A(H3N2) viruses analysed in 2020/21 belonged to subclades 3C.2a1b.2a1 or 3C.2a1b.2a2. These were poorly recognized by antisera raised against Northern Hemisphere vaccine viruses (A/Hong Kong/45/2019-like and A/Hong Kong/2671/2019-like). Influenza B/Victoria viruses of clade V1A.3a predominated with subclade 3a1 and were observed almost exclusively in the People’s Republic of China. Sub-clades of 3a2 were observed more broadly across the People’s Republic of China, Europe, Singapore, South Africa and East Africa. No influenza B/Yamagata viruses with collection date since March 2020 has been confirmed by WHO CCs.

2.2.4 Influenza activity in the Southern Hemisphere

Dr Ian Barr, Deputy Director, WHO collaborating centre, Victorian Infectious Diseases Reference Laboratory (VIDRL), The Peter Doherty Institute for Infection and Immunity, Australia

Dr Barr summarized influenza activity in the Southern Hemisphere. He began his presentation by acknowledging the continued work of influenza laboratories across both the WHO regions for influenza surveillance. The sustained testing and data reporting instil confidence in observations of decreased influenza activity. Similar to the Northern Hemisphere, influenza detections in the Southern Hemisphere declined in the second quarter of 2020 and have remained low since. While there has been some influenza activity in 2021, its usual seasonality was no longer evident.

Most countries in the Southern Hemisphere have observed no influenza activity. Dr Barr showed examples from four countries. South Africa has experienced an influenza B/Victoria outbreak; both Chile and Australia have observed very little activity; and Timor-Leste observed some influenza A(H3N2) activity in late 2020 and sporadically in 2021. Almost all influenza viruses detected in the Southern Hemisphere were influenza A(H3N2) or influenza B/Victoria. Dr Barr also noted that the diversity of influenza viruses has narrowed since the pandemic erupted.

He reiterated the request for NIC to forward any positive samples to assist with discussions in the upcoming Vaccine Composition Meeting (VCM), due to be held in September 2021 to prepare recommendations on the composition of seasonal influenza vaccines. September 2021 meeting is one of the bi-annual meetings WHO organizes in consultation with an advisory group of experts to analyse influenza virus surveillance data generated by the WHO Global Influenza Surveillance and Response System (GISRS), and issues recommendations on the composition of the influenza vaccines for the following influenza season.
These recommendations are used by the national vaccine regulatory agencies and the pharmaceutical companies to develop, produce and license influenza vaccines. Dr Barr concluded his presentation with musings on the future of influenza activity in the context of the COVID-19 pandemic; relaxation of international travel restrictions will, in all likelihood, lead to introduction of influenza to countries that currently have little activity and the world may see decreased influenza vaccination rates as a result of influenza vaccine apathy.

2.3 Plenary 2: Review of ILI and SARI surveillance – challenges and experiences of SE Asia Region/Western Pacific Region countries in the context of COVID-19

**Moderator: Dr Joshua Mott, Director, Centers for Disease Control and Prevention (CDC), Atlanta, United States of America, Thailand Office**

2.3.1 Cambodia

**Dr Seng Heng, Chief of Surveillance Bureau at CDC, Ministry of Health (MoH)**

**Experience**

Cambodia has successfully leveraged its existing influenza sentinel surveillance system for monitoring SARS-CoV-2 virus transmission for the COVID-19 response. Its national influenza centre functions as a SARS-CoV-2 reference laboratory and all ILI and SARI samples were dual-tested for influenza and SARS-CoV-2. Cambodia has extended the number and geographical coverage of ILI sites to enable reaching the WHO-recommended minimum target of weekly samples. Cambodia strengthened partnerships for influenza surveillance, leading to increased support from partners for both seasonal influenza and COVID-19 surveillance. Through its sentinel surveillance system, Cambodia detected the first human case of influenza A(H9N2) in Siam Reap; the NIC played a key role in subtyping and identifying this strain. This resulted in an “One Health”, multi-partner joint investigation.

**Challenges**

Cambodia also faced challenges to maintaining ILI and SARI surveillance during the pandemic. Changes in health care-seeking behaviour led to a decreased number of patients at sentinel surveillance sites and a resultant decline in samples. The repurposing of staff for the COVID-19 response caused a decline in the number of human resources for influenza surveillance. There were also competing priorities for health staff.

The other issue involved shortages of sample collection materials, including personal protective equipment (PPE). On the other hand, supply chain issues affected acquisition of reagents and other consumables required for laboratory diagnosis. Moreover, the lockdown in the country led to challenges to transportation of samples to the national influenza centre in Phnom Penh. Additionally, managing the increased number of sentinel surveillance sites was challenging with limited resources available. It also had a flow-on effect on data management and timely reporting with inadequate information regarding technical capacity.
Opportunities

Dr Seng Heng then detailed the opportunities that have emerged from the COVID-19 response in Cambodia for building and strengthening health security systems in the future. The interest in strengthening public health capacity should be leveraged to bolster the public health workforce. In this context, influenza-testing capacity in the country could be enhanced by utilizing new laboratories created for the COVID-19 response. Cambodia will continue to monitor and evaluate the national influenza surveillance system through intra-action reviews to identify gaps that need to be addressed ahead of future influenza outbreaks.

2.3.2 Indonesia

Dr Alfinella Izhar Iswandi, Ministry of Health, Indonesia

Experience

Indonesia has observed a decline in influenza cases since the beginning of the pandemic. Samples from both ILI and SARI sentinel surveillance sites are being tested for both SARS-CoV-2 and influenza viruses. Epidemiological data are collected and analysed at the national level and results are disseminated locally via a monthly bulletin and reported to both FluNet and FluID of the WHO global data-sharing platform.

Challenges

Explaining the context, Dr Iswandi highlighted that all health-care workers were assigned additional tasks related to COVID-19. It led to a decline in human resources needed to maintain influenza surveillance in Indonesia. Moreover, many health-care workers tested positive for SARS-CoV-2. Additionally, there has been a high turnover – staff trained in ILI and SARI surveillance. The newly recruited staff had to be trained online. The online training had its own challenges, including issues related to connectivity and maintaining engagement. A decline in outpatients seeking care at sentinel surveillance sites of ILI affected the number of samples tested for influenza viruses. Some patients expressed reluctance to get swabbed for specimen collection due to COVID-19-related stigma.

Operationally, the manual coding of COVID-19 and influenza samples at laboratories caused a delay in collating and analysing influenza surveillance data at the national level. PHSM imposed in the country caused delays in laboratory shipment, which also led to delays in reporting. Finally, the COVID-19 response has come at the expense of budget allocations for maintenance and sustenance of ILI and SARI surveillance activities in Indonesia.

Lessons learned

Dr Iswandi concluded that despite numerous challenges, Indonesia was able to utilize its well-established influenza sentinel surveillance system to monitor COVID-19 and influenza simultaneously. However, there is a strong need for strengthening the procurement management system for laboratory reagents and specimen shipments. A web-based laboratory reporting system is also needed to reduce the workload and the hours put in by data entry operators. Dr Iswandi highlighted that sustainability of ILI/SARI surveillance would require sufficient budget allocations.
2.3.3 Nepal

**Dr Runa Jha, Director, National Public Health Laboratory (NPHL), Nepal**

**Experience**

At the beginning of the pandemic, Nepal utilized the existing influenza sentinel surveillance network of laboratories. Initially, the country sent samples to the laboratory at the School of Public Health, The University of Hong Kong, for SARS-CoV-2 testing. Once reagents were received, the existing influenza molecular diagnostic testing capacity in laboratories was immediately transformed to enable SARS-CoV-2 testing.

Nepal rapidly expanded from no laboratories with SARS-CoV-2 testing capacity in February 2020 to 96 laboratories in July 2021. Meanwhile, the influenza surveillance system was overwhelmed by the significant number of SARS-CoV-2 tests and the national influenza centre pivoted on a SARS-CoV-2 testing laboratory.

However, Nepal was quickly able to resume influenza testing, using SARS-CoV-2-negative samples, obtained from symptomatic cases compatible with surveillance case definitions for influenza surveillance. Nepal was also able to leverage its experience gained while establishing an NIC to develop COVID-19 standard operating procedures (SOP), expand the laboratory system, develop a national quality assurance system and form a decentralized laboratory system, governed by the Nepal Public Health Laboratory.

**Challenges**

Dr Jha noted that shifting priorities of laboratories, hospitals and the government have been a challenge to maintaining the influenza surveillance system in Nepal. The national lockdown resulted in transportation issues, externally and internally, and in difficulties in acquiring reagents for testing samples.

Redeployment of staff also led to challenges in maintaining influenza surveillance. As a result of testing samples negative for SARS-CoV-2 for influenza, there were numerous challenges with influenza data analysis. Also transported to the NIC for surveillance were samples collected during acute respiratory infection (ARI) outbreaks and those from non-sentinel surveillance sites. As a result, these samples were selective and not representative.

**Opportunities**

Dr Jha noted that the Nepal government’s recognition of the important role of the laboratory systems during the COVID-19 response provided opportunities to strengthen molecular diagnostic capacity in all provincial laboratories. It resulted in an increase in the number of personnel with training in molecular diagnosis. The transport and communication systems across the laboratory network improved. Using these opportunities, Nepal established a genetic consortium for molecular testing of SARS-CoV-2, which offers the opportunity to be leveraged for influenza as well in the future.
2.3.4 Timor-Leste

*Dr Filipe de Neri Machado, Head of Surveillance, Ministry of Health, Timor-Leste*

**Experience**

Dr Machado reported that there was a major strategic shift towards integration of influenza and SARS-CoV-2 surveillance in Timor-Leste in mid-2020. The country also increased the number of ILI and SARI surveillance sites. This enabled the country to detect low levels of influenza, in particular, the subtype of influenza A(H3N2) activity in 2021.

**Challenges**

The COVID-19 pandemic led to the suspension of routine influenza activities, including quarterly meetings and supervision and monitoring missions in Timor-Leste. Many health staff were redeployed to the COVID-19 response. As a result, laboratories, in particular, were understaffed. The pandemic also interrupted the implementation of the country’s 2021 influenza work plan. It also impeded travelling overseas for planned training activities.

**Lessons learned**

Timor-Leste was able to integrate monitoring of SARS-CoV-2 with its surveillance system and demonstrated the utility of such an approach in a limited-resource setting. With improved infrastructure and human resources, Timor-Leste was able to collect a significantly high number of samples. Going forward, Timor-Leste needs to set up a dedicated influenza surveillance data server. There is also a need to identify training requirements and conduct a need-based training for influenza focal points at sentinel surveillance sites.

2.3.5 Viet Nam

*Dr Le Quynh Mai, Deputy Director, National Institute of Hygiene and Epidemiology, MoH*

**Experience**

Dr Mai explained the COVID-19 pandemic response and the National Influenza Surveillance System (NISS) operational in Viet Nam. It is a hospital- and community-based surveillance system consisted of event-based surveillance, severe viral pneumonia surveillance, ILI and SARI surveillance and an e-surveillance component, which is the national notifiable disease surveillance system.

NIcs (National Institute of Hygiene and Epidemiology, Hanoi, and Pasteur Institute, Ho Chi Minh City) conduct the ILI surveillance base from 4 to 15 sentinel surveillance sites located in four regions of Viet Nam. During the pandemic, NICs were involved in conducting SARS-CoV-2 testing, developing SOP for SARS-CoV-2 detection, conducting technical training for public health laboratories for SARS-CoV-2 detection, monitoring evolution of SARS-CoV-2 virus and determining vaccine immunogenicity.
Challenges

Testing for influenza was challenging as the laboratories were overwhelmed in Viet Nam with samples received for testing for SARS-CoV-2. This was further complicated by the lack of automated systems in laboratories. There were delays in supply of diagnostics, reagents and consumables required for laboratory testing. All these challenges led to disruption in ILI surveillance, decline in samples collected for ILI surveillance and delays in reporting. Quality assurance of diagnosis was also challenging in Viet Nam.

The Delta variant of the SARS-CoV-2 virus was first detected in Viet Nam in April 2021 in the Yen Bai province. Subsequently, the outbreak had erupted in Vinh Phuc, Hanoi, Bac Ninh, Bac Giang and other locations in the north of Viet Nam. This was controlled in early June 2021. From the middle of June, the Delta variant appeared in Ho Chi Minh City. Then the outbreak spread across 19 provinces in southern Viet Nam. This turn of events was challenging for the NICs as they were overloaded with samples for testing and the staff at the NICs were required to conduct trainings, perform testing and get involved in quality management of diagnosis.

Lessons learned

It was evident from the experience that the testing strategy in the country had to be flexible enough to accommodate the rising numbers, depending on the evolution of the epidemiology of the outbreak, depending on the stages of the outbreak/pandemic.

Viet Nam has to continue ILI surveillance in integration with SARS-CoV-2 monitoring. In relation to SARS-CoV-2, there is a need for monitoring the evolution of the SARS-CoV-2 virus as the pandemic progresses. The country will have to embark on improving laboratory functions and sustain it.

2.4 Plenary 3: Key priority activities for integrating sentinel surveillance for influenza with SARS-CoV-2 and introduction of GISRS+

Moderator: Dr Vivi Setiawaty, Director for Research and Development of Biomedical and Basic Health Technology, Ministry of Health, Indonesia

2.4.1 Integrated surveillance of influenza and SARS-CoV-2

Dr Wenqin Zhang, Unit Head, Global Influenza Programme, WHO HQ

Dr Zhang described the rationale for integration of influenza and SARS-CoV-2 surveillance, and its potential utility. She highlighted that the critical public health questions answered through influenza surveillance are the same public health questions that need to be answered for SARS-CoV-2. For example:

- How many new cases are there?
- What viruses are circulating? Which genetic clade is the most prevalent?
- What is the relative level of circulation of the virus compared with previous epidemics? What is the relative severity of the disease caused by the virus?
➢ Which viruses should go into vaccines? When should the vaccine be updated?

It was pointed out that in a similar way, the key attributes of the GISRS influenza surveillance system are also applicable to SARS-CoV-2 surveillance:

➢ representative, timely, standardized and ongoing data collection;
➢ quality of collected data, rather than its quantity;
➢ testing of a minimum of 50–100 representative specimens from cases that meet the ILI/SARI/ARI case definition; and
➢ genomic sequencing of a minimum of 15 SARS-CoV-2 positive specimens per week (if no capacity in the country, forward specimens to a reference laboratory for genomic sequencing).

GISRS has demonstrated its effectiveness for monitoring influenza activity through routine surveillance that is complemented by outbreak investigations. Dr Zhang informed the audience that GISRS+ aims to leverage this well-established system to address the public health needs caused by respiratory infections due to multiple pathogens simultaneously, using a cost-effective and resource-efficient approach. It is evident that as the pandemic evolves, public health resources directed to integrated surveillance, leveraging the ILI/SARI sentinel surveillance system, will be more effective than using a universal surveillance system, especially in limited-resource settings.

Dr Zhang then emphasized the importance of quality of surveillance data. The information generated, using laboratory data collected through intensive work and resources, are not utilized to their best potential unless the data thus collected are reported in a timely manner. She also emphasized the importance of sampling strategies and representativeness of sentinel surveillance data, and the need for disaggregating non-sentinel data from the sentinel data while reporting to the global data-sharing platform.

The COVID-19 pandemic has resulted in the opportunity for providing additional technical and financial support from WHO and partners to Member States. Dr Zhang stressed that the GISRS network must continue to demonstrate its value, since for the development of the concept of GISRS+ and it to be operationalized, engagement with and support of Member States is essential.

Dr Zhang concluded her presentation by reiterating the potential threat of influenza to global health security. While influenza remains the primary goal of GISRS, it appears that the integration of surveillance of respiratory infections caused by other respiratory pathogens with influenza surveillance is a cost-effective method to manage priority public health needs simultaneously.

2.5 Breakout session

At the outset of the breakout session, Dr Manish Kakkar, Technical Officer for High-Threat Pathogens with WHO SEARO, introduced the intended outcomes of the session. It was intended to identify prioritized key actions for Member States and WHO for three key thematic areas in the context of integrated influenza surveillance with SARS-CoV-2
monitoring. In addition, the group work focused on eliciting the feasibility of expanding the current influenza surveillance system to include other respiratory viruses of epidemic potential.

The three thematic areas for the breakout groups are as follows:

1. Key priority activities for Member States and WHO to sustain ILI/SARI sentinel surveillance and monitoring of SARS-CoV-2, using ILI/SARI sentinel surveillance sites (moderated by Dr Siddhartha Saha of US CDC and Dr Katelijn Vandemaele of WHO HQ);

2. Key priority activities for Member States and WHO to strengthen laboratory diagnosis for integrating and sustaining ILI/SARI sentinel surveillance with monitoring of SARS-CoV-2, using ILI/SARI sentinel sites (moderated by Dr Ian Barr of WHO CC VIDRL, Australia); and

3. Key priority activities for Member States and WHO to strengthen data management and reporting for integrated ILI/SARI sentinel surveillance and monitoring of SARS-CoV-2, using ILI/SARI sentinel sites (moderated by Dr Julia Fitzner of WHO HQ).

Outcome of the discussions of the breakout session is summarized in Section 2.7.

Plenary session 5: Breakout session feedback.

2.6 Plenary 4: COVID-19 pandemic vaccine deployment – experiences of Member States in the SE Asia Region and the Western Pacific Region

Moderator: Dr Vivi Setiawaty, Director for Research and Development of Biomedical and Basic Health Technology, Ministry of Health, Indonesia

2.6.1 Bhutan

Mr Binay Thapa, Chief Laboratory Officer, Royal Centre of Disease Control, Department of Public Health, Ministry of Health, Bhutan

Mr Thapa presented the experiences of pandemic vaccine deployment in Bhutan. He stated that the key to Bhutan’s success in pandemic vaccine deployment was robust preparation prior to its implementation. Preparatory meetings began in July 2020 to develop vaccination deployment strategies and guidelines, assess cold chain storage capacity, and plan and map human resources. The Bhutan Vaccine System was developed to allow real-time collection and monitoring of vaccine uptake and AEFI data. The stakeholders engaged included local government bodies, development partners and media.

Finally, mock drills were undertaken and lessons learned, and feedback received were incorporated into the final vaccine deployment plan. Five days after the first delivery of COVID-19 vaccines, Bhutan’s first-dose campaign began; this campaign lasted for 10 days and resulted in 95% coverage of the eligible population. This was followed by home-based deployment of COVID-19 vaccine, wherein health-care workers were deployed to ensure that no one was left behind without access to COVID-19 vaccines.
Having incorporated lessons learned from the first-dose campaign, the second-dose campaign took only 7 days to be completed in July. Bhutan has now vaccinated 99.6% of its eligible population with at least one dose while 90.2% have received both doses. Almost all recipients were vaccinated with heterologous doses (95%). This approach was a result of the vaccines available to the country and also of the evidence generated from other countries. However, this approach required particular attention to the public communication and advocacy component. While there were some reservations and opposition to heterologous doses, the support of religious leaders in disseminating vaccine-related information was pivotal for mitigating vaccine hesitancy.

2.6.2 Mongolia

Dr Baigalmaa Jantsansengee, Deputy Director for Surveillance and Prevention, National Center for Communicable Diseases, Ulaanbaatar, Mongolia

Dr Baigalmaa described the experience of the pandemic vaccine deployment in Mongolia. As the least densely populated country in the world, Mongolia faced a unique challenge to achieving widespread vaccination coverage in the country. As of mid-August, Mongolia had received 5.5 million vaccine doses and deployed 4.5 million doses out of them. Mongolia prioritized health-care workers, front-line responders to the pandemic, people with underlying conditions and those aged 65 years and above.

As of 12 August 2021, 93.9% of the target population (those aged 18 years and above) had received their first dose of COVID-19 vaccine, with 85.3% of them being fully vaccinated. Of health-care workers, 99.9% had received their first dose, with 99.5% of them being fully vaccinated. Mongolia has implemented a self-reporting system to collect data on adverse events following immunization (AEFI). AEFI were very rare. Another success of the COVID-19 vaccine deployment in Mongolia was the implementation of a national online vaccination registration platform. This platform provides individuals with vaccine certificates and has allowed the country to monitor breakthrough infections.

The challenges to pandemic vaccine deployment in Mongolia were mostly related to operational issues. It included a lack of human and physical resources and storage issues at different stages in the cold chain. Achieving timely COVID-19 vaccination in rural areas was a challenge. Anti-vaccination groups presented a challenge to acceptance of vaccines by the population. The lowest vaccination coverage was observed in the 18–34 age group. This group is also the most mobile of the social groups.

Meanwhile, emerging variants of concern (VoC) have led to a decrease in vaccine effectiveness during the June wave of transmission of SARS-CoV-2 in Mongolia. Concluding the presentation, Dr Baigalmaa described the lessons learned during the pandemic vaccine deployment process. According to Dr Baigalmaa, the operational preparation for vaccine deployment is vital and requires effective management and planning at each level (national, district, unit levels).
While deploying pandemic vaccines, Mongolia has used four different types of vaccines. Mongolia needs to monitor the safety of these four vaccines and conduct their effectiveness studies. Dr Baigalmaa further said that advance planning for capacity-building for vaccine deployment is vital. Dr Baigalmaa also highlighted the need for continuous risk communication targeted at addressing anti-COVID-19 vaccination messages and the need for maintaining public health measures by individuals despite being vaccinated.

2.6.3 The Philippines

Ms Rowena J. Capistrano, Consultant, National Vaccination Operation Centre (NVOC), the Philippines

Ms Capistrano described the experiences of pandemic vaccine deployment in the Philippines. The country utilized a whole-of-government and whole-of-society approach. Success of the Philippines relied upon a well-prepared health system and extensively engaged local government units involved in adequately informing and empowering communities. The country developed the Philippines National Deployment and Vaccine Plan and it was an end-to-end guide on vaccine deployment, based on the values framework for vaccine allocation and prioritization recommended by the WHO Strategic Advisory Group of Experts on Immunization (SAGE).

A key part of the pandemic vaccine deployment process involved ensuring demand generation for vaccine uptake through aligned communications across public and private sectors and utilization of champions (community organizers, artists, influencers) to engage and activate communities. As of mid-August, the country had received 43 million vaccine doses and deployed 38 million of them.

Ms Capistrano described the facilitating factors of vaccine deployment in the Philippines. Those included utilization of a whole-of-society approach that incorporated multilateral agreements between the government and the private sector; vaccine donations from multiple sources, including COVAX; the passage of new laws and health policies that expedited vaccine procurement, setting up of an indemnity fund; and utilization of social media for delivery of transparent messaging from well-recognized and respected sources, e.g. WHO, UNICEF and GAVI.

The main challenge faced by the Philippines involved supply chain issues. These issues were related to the archipelagic nature of the country. In the process of pandemic vaccine deployment, any region in the country was hard-to-reach. As a result, constantly revisiting and adjusting logistic plans were required to ensure access to and delivery of vaccines in all areas of the country. Other challenges included facing the provisions of procurement laws preventing the government from releasing funds for something not yet delivered (this was overcome by policy change), the large target population (77 million) for vaccination in the country, vaccine hesitancy and issues related to IT-system readiness with limitations to internet connectivity for the population across the country.
2.7 Plenary 5: Breakout session feedback

Moderator: Dr Vivi Setiawaty, Director for Research and Development of Biomedical and Basic Health Technology, Ministry of Health, Indonesia

2.7.1 Surveillance

In general, there was an agreement among participants that the integration with monitoring of COVID-19 is the simplest way to sustain influenza surveillance and increase the number of samples being tested for influenza. However, a number of barriers to this intervention were raised by different countries:

- Public health staff are already overburdened with COVID-19 response and, therefore, it is challenging to maintain and sustain influenza surveillance activities in the context of transmission of SARS-CoV-2 virus.

- In some countries, the response to COVID-19, including surveillance, is administered by a separate entity that is not linked to the administration of existing influenza sentinel surveillance sites. Therefore, it poses practical difficulties in integrating monitoring of SARS-CoV-2 virus, leveraging the sentinel surveillance sites of influenza, from an administrative perspective.

- Patients, who meet the ILI or SARI case definitions, are attending COVID-19 screening centres rather than existing influenza sentinel surveillance sites. To overcome this barrier, South Korea, for example, has been testing samples collected from COVID-19 monitoring sites for influenza as well; Cambodia has been testing samples collected from pneumonia patients for both COVID-19 and influenza; and Myanmar has begun collection and testing of samples for influenza from non-sentinel surveillance sites. Bhutan has converted all hospitals with admissions of SARI cases in the country into sentinel surveillance sites, and Laos has requested staff to test all ILI or SARI cases for influenza in addition to SARS-CoV-2 one day per week, ensuring systematic sampling and testing for influenza.

- Despite several innovations to collect the essential minimum of specimens from ILI and SARI patients, as recommended by WHO in the interim guidance, laboratories are too overwhelmed by the number of samples received for testing for SARS-CoV-2, affecting testing for influenza.

The participants elaborated on the need for collecting key information (data) with specimens collected from suspected COVID-19 patients, if they are to be tested for influenza as well, with a view to ensuring adherence to eligibility for influenza surveillance and submission to the global data-sharing platform for influenza.

Looking to the future, it was assumed that when transmission of SARS-CoV-2 becomes endemic, many of these issues would no longer be problematic. However, in the interim, countries were encouraged to continue to think of innovative solutions to overcome the current challenges to resume, maintain and sustain influenza surveillance, including the use of multiplex PCR testing that includes both influenza and SARS-CoV-2 to reduce the burden on laboratories.
With regard to timeliness of reporting, a common issue raised involved the reduction in the number of human resources available for influenza-related work at influenza laboratories, many of which have pivoted on being SARS-CoV-2 testing laboratories in the countries. One suggestion that emerged in the discussion for improving timeliness of reporting by sentinel surveillance sites was providing a regular feedback to the sites on their performance. This is to motivate them to report on time, looking at their own performance and also comparing it with the performance of other sentinel surveillance sites.

During the discussion, there was general support for creation of one broad case definition to be used within the GISRS+ system. Participants justified this on the grounds that implementation of multiple surveillance case definitions was more resource-intensive. However, they also said that changes in sensitivity and specificity with a new multiple surveillance case definition must be investigated. The lessons learned from countries that have established ARI surveillance systems and countries that have introduced RSV surveillance were recommended to be shared in future NIC meetings and other forums.

2.7.2 Laboratory diagnostics

The laboratory group began by discussing the importance of timely uploading data pertaining to laboratory diagnosis and sequencing to the FluNet, WHO COVID-19 database. The need for sharing influenza-positive samples with WHO collaborating centres for analysis, prior to vaccine consultation meetings, was also discussed. The group discussed testing SARS-CoV-2 negative samples that meet the ILI or SARI case definition for influenza. However, another issue for testing surveillance samples for influenza during the pandemic involved the lack of human resources as well as overburdened personnel at the NICs and other laboratories to test samples, even if specimens are being collected from the sentinel and non-sentinel surveillance sites for laboratory confirmation of influenza.

It was suggested that multiplex-real-time PCR kits that allow simultaneous detection of SARS-CoV-2 and influenza A and B, where possible, be used for at least a proportion of the samples intended to be tested for influenza. It was also suggested that, where feasible and necessary, countries that do not have genomic sequencing capacity yet be supported by WHO to establish in-country sequencing systems and facilities.

Moving towards the operationalization of the GISRS+ concept, country influenza laboratory focal points were requested to explore whether countries have the potential and capacity to expand their respiratory sample testing algorithms and testing platforms to include detection of further respiratory viruses causing respiratory infections.

2.7.3 Data management

The group discussed methods that have the potential to improve data quality and timeliness of reporting from sentinel surveillance sites to the national level, and in turn from the national level to the WHO global data-sharing platform (FluMart). The integration of influenza and SARS-CoV-2 surveillance and synchronization of epidemiological and virological data reporting are resource-efficient methods to achieve data quality improvement and timeliness of reporting in the context of the pandemic.
Where feasible, countries that do not yet have a web-based method for ILI and SARI data reporting from sentinel surveillance sites requested WHO support to try to implement such methods. Finally, the significance of advocating the importance of sustained influenza surveillance as a means of timely detection and early warning for response, from the health security point of view, to both senior programme management and management of the influenza sentinel surveillance sites was reiterated in the context of encountering apathy towards influenza during the pandemic.

The participants echoed the fact that the pandemic has resulted in reduced human resources, reduced enrolment of ILI and SARI cases for surveillance, mostly as a result of a decrease in outpatient numbers at sentinel surveillance sites, and delays in data reporting. The importance of continuing or resuming regular weekly reporting of influenza data to FluMart was reiterated. To improve timeliness and completeness of epidemiological and virological data reported to FluMart, participants requested investments in data management training by WHO and other partners; the use of information technology and availability of adequately trained human resources to build robust data management systems that allow more automatized exchange of data were also topics of group discussion.

Though expanding the number of sentinel sites was discussed as a means of reaching the WHO-recommended minimum number of samples to be tested and collection of their epidemiological and virological data, participants also raised concerns about expansion being resource-dependent. They requested initiation of collective efforts to build a culture whereby regular feedback is provided from the national to the subnational level of sentinel surveillance in countries and, in the same way, feedback on data reporting is provided from WHO to the Member States. Some challenges that were discussed included:

- difficulties in disaggregating data by sentinel or non-sentinel collection;
- general information technology issues; and
- a lack of a universal, systematic and standardized method to report from subnational to national levels in countries.

Looking ahead to the implementation of GISRS+ and to further strengthen the GISRS foundation for reporting data to the global platform, there was a request for WHO support to countries for implementation of a web-based reporting system, with a view to improving timeliness and completeness of influenza data reported to FluMart, and developing a more integrated data management system for data collection that combines data from multiple sentinel surveillance sites.
2.8 Plenary 6: COVID-19 vaccine deployments – WHO-SEARO and WHO-WPRO perspective

Moderator: Dr Vivi Setiawaty, Director for Research and Development of Biomedical and Basic Health Technology, Ministry of Health, Indonesia

2.8.1 COVID-19 vaccine deployment – perspective of WHO-WPRO

Dr Nyambat Batmunkh, Technical Officer for Vaccine Preventable Diseases and Immunization (VDI), WHO-WPRO

Dr Batmunkh described the experiences of COVID-19 vaccine deployment in the Western Pacific Region. Each country in the Region developed a National Deployment and Vaccination Plan (NDVP), based on WHO guidance documents, and then undertook readiness assessments using the WHO COVID-19 vaccine introduction toolkit. A review of country NDVPs was undertaken prior to the allocation process.

So far, 2.2 billion doses of vaccines have been acquired by countries in the Region (of which 31.9 million were received via COVAX). Of the countries that report vaccine-related information to WHO, 64.2% of the available doses have already been administered. As of the week of the present meeting, the vaccination coverage in the entire population varies markedly among countries with coverage of receiving at least one dose, ranging from 1% to 76% in non-Pacific Island countries (a coverage range of 0% to 71% for all recommended doses) and from 6% to 100% in Pacific Island countries (a coverage of 2%–95% for all recommended doses).

Dr Batmunkh then described challenges the Western Pacific Region has faced. There has been a limited supply of COVID-19 vaccines to some countries with large populations (e.g. Viet Nam). The deployment of two thirds of vaccines received by countries indicates that vaccine uptake is not fast enough in some countries. Delays in distribution and delivery of vaccines have resulted from a variety of reasons, including logistic and transport issues, limited human resources, inadequate number of vaccination delivery sites and slow release of funds from the national to the subnational level.

The low demand for vaccination in countries with low level of transmission of SARS-CoV-2 has also hampered vaccination efforts in these countries (e.g. Papua New Guinea, Pacific Island countries). Some countries have faced the issue of vaccine hesitancy among health-care workers and other essential or front-line workers (e.g. Papua New Guinea, Solomon Islands, Tonga) while others have encountered issues relating to vaccine brand preference (e.g. the Philippines).

At the end, Dr Batmunkh described the lessons learned during deployment of COVID-19 vaccines in the Western Pacific Region. He was of the opinion that country readiness was crucial to aggressively deploy COVID-19 vaccines in the Region. It was further highlighted that there was a need for strengthening the reporting mechanisms to allow enhanced reporting of vaccine coverage and disease surveillance with vaccination data to identify breakthrough infections and conduct COVID-19 vaccine-specific pharmacovigilance activities.
He further stressed that successful deployment of COVID-19 vaccines required strengthened coordination mechanisms at both national and subnational levels. Innovative strategies are required to generate vaccine demand, acceptance and confidence among the general public. Dr Batmunkh concluded his presentation by stating that identification of circulating SARS-CoV-2 variants is required to ensure effectiveness of the COVID-19 vaccines available.

2.8.2 COVID-19 vaccine deployment – perspective of WHO-SEARO

Dr Emmanuel Njambe, Technical Officer, Immunization and Vaccine Development (IVD) unit, WHO-SEARO

Dr Njambe described the experiences of COVID-19 vaccine deployment in the SE Asia Region. Deployment began with NDPV development in all 11 countries and it was guided by readiness assessments conducted based on guidelines issued by the Strategic Advisory Group of Experts on Immunization. The countries began by planning key components required to support vaccination of 20% of the population. Partners conducted reviews of NDPVs to support refinements to them.

Currently, 10 of 11 countries in the Region have commenced vaccine roll-out, with 8 different types of vaccines being used across the Region and over 720 million doses administered. Dr Njambe informed participants that bilateral deals and domestic manufacturing accounted for most of the vaccine doses available for use in the Region (91%), with 6% received through the COVAX facility. Three per cent of the doses were received through donations.

At the time of the meeting, in the Region, 26.4% of individuals had been vaccinated with at least one dose, and 8.5% were fully vaccinated. In all countries, health-care workers, front-line and other essential workers, and the elderly population were prioritized. Dr Njambe presented figures pertaining to vaccination coverage per population across the SE Asia Region and drew attention to the large variation existing across countries (the range: 3.3%–74.2% for the first dose and 2.8%–62.8% for the fully vaccinated status).

The vaccination utilization was consistently high across the SE Asia Region with the utilization of vaccine doses during the last 30 days ranging from 50%–100%. He informed participants that all countries are undertaking various risk communication activities, monitoring of AEFI and vaccine uptake. According to him, enablers for vaccine deployment in the Region included strong political will, commitment of governments and health professionals, accelerated vaccine authorization processes, strong partner coordination at national and subnational levels, timely development of plans and guidelines for supply chain and logistics management and cooperation across regional countries to acquire vaccine donations.

Also beneficial to vaccine deployment were the existing country experiences of routinely managing the Expanded Programme on Immunization (EPI) and the involvement of highly experienced and trained polio immunization staff in pandemic vaccine deployment. The vaccine availability also has been a key challenge to pandemic vaccine deployment, with vaccine supply levels not meeting the public demand. Further, managing several
different sources of vaccines and different types of vaccine were an additional burden and new experience, compared to handling of routine immunization with one vaccine.

The experience underscored that all these challenges necessitated differential risk communication strategies and engagement in monitoring vaccine coverage, assessing vaccine effectiveness and vaccination safety. Countries have highlighted that the short residual shelf-life of vaccines impacted deployment strategies. He concluded by saying that information on vaccines has been rapidly evolving and continues to do so every now and then with the emergence of new evidence, and countries have had to be flexible and learn “on the fly” in this new landscape of a deluge of fresh vaccine-related information.

2.9 Plenary 7: Zoonotic influenza

**Moderators: Dr Richard Webby, Director, WHO collaborating centre, St Jude’s Children’s Research Hospital, Memphis, Tennessee, USA, and Dr Lesa Thompson, Regional Project Officer, Regional Representation of the World Organisation for Animal Health (OIE) for Asia and the Pacific**

2.9.1 Zoonotic influenza: the global update

*Dr Katelijn Vandemaele, Medical Officer, Global Influenza Programme, WHO HQ*

Dr Vandemaele provided the global update on zoonotic influenza. In 2020 and 2021, there has been an increase in the incidence of avian influenza, mostly of the type influenza A/H5N8. Despite this increase, incidence is still far low compared with that of 2014–2018 when outbreaks of influenza A/H7N9 and A/H5N1 occurred. From October 2020 to August 2021, there have been 51 human infections with zoonotic influenza A viruses of avian source, the majority of which were type A/H9N2 (n=22) or type A/H5Nx (n=28). There have also been 21 zoonotic cases of a swine source, the majority of which were A/H1N1v.

The increase in incidence may be a result of a detection bias, with more attention being paid to avian influenza cases during the pandemic. The majority of zoonotic cases have been detected through routine sentinel surveillance, which is indeed a credit to countries that are preoccupied with pandemic response in the context of COVID-19. Every time a human infection with zoonotic influenza is reported, a risk assessment is undertaken. This information is summarized and disseminated to Member States and used during vaccine composition meetings to inform about the updates on candidate vaccine viruses for pandemic preparedness.

Pandemic influenza risk assessment [using the Tool for Influenza Pandemic Risk Assessment (TIPRA)] exercises are undertaken, using the “One Health” approach. Experts from both human and animal health sectors are involved in this joint risk assessment. Viruses are assessed for both their likelihood of human-to-human transmission and potential impact. The recent H5x infections have been classed as low-risk in terms of likelihood of human-to-human transmission and potential impact, compared to previous A/H7N9 viruses.

In summary, zoonotic influenza remains a threat to global health security. Experience has demonstrated that the influenza surveillance systems globally are working to detect
zoonotic influenza spill-overs to humans. The “One Health” platforms must continue to be strengthened and collaborations encouraged at all levels to optimize preparedness for detection and prompt and appropriate response to influenza viruses of pandemic potential.

2.9.2 The regional priorities on zoonotic influenza of the Food and Agriculture Organization of the United Nations (FAO)

**Dr Filip Claes, Regional Laboratory Coordinator, FAO**

Dr Claes began his presentation by summarizing the work of FAO-supported regional surveillance since the first avian influenza-focused programmes were operationalized in 2004. It has focused on seven high-risk countries in Asia (Bangladesh, Cambodia, Indonesia, Lao People's Democratic Republic, Myanmar, Nepal and Viet Nam) and on A/H5Nx, A/H7Nx and A/H9Nx viruses. From 2014–2019, approximately 40 000 samples have been analysed from live animal markets, ducks and poultry.

This analysis aims to determine the landscape of zoonotic influenza virus circulation and evolution in the Asia region. It is of paramount importance to early warning and development of targeted risk mitigation measures, such as increased biosecurity at farms and animal vaccinations. These data also inform decision-makers about the risk of spillover of these viruses to humans. The heterogeneity of avian influenza strains circulating currently means that there are opportunities for their reassortment. Dr Claes informed participants that building on the experience of avian influenza surveillance in the Asia region over the past 15 years, FAO plans to scale up activities to ensure an approach of integrated systems to surveillance of zoonotic diseases, increased country ownership of surveillance activities and establishing a linkage to risk reduction and adherence to good practices to reduce the possibility of spill-overs onto human beings.

FAO plans to move beyond avian influenza surveillance to non-avian zoonotic influenza surveillance in Asia and recently undertook an online consultation with global and regional influenza experts to plan and prioritize. In summary, FAO plans to take a systems approach to leverage the solid foundation of avian influenza surveillance in Asia to incorporate surveillance of other zoonotic influenza viruses and encourage country ownership of zoonotic influenza surveillance.

2.10 Closing remarks

**Dr Jos Vandelaer, Regional Emergency Director, WHO-SEARO**

Dr Vandelaer closed the Fourteenth Bi-regional Meeting of national influenza centres and influenza surveillance in the Western Pacific and South-East Asia Regions.

He noted that many rich discussions took place during the meeting and acknowledged that the resulting recommendations and conclusions were indicative of the fact that the group had met the objectives it set out to achieve. Member States have agreed on methods to resume and sustain influenza surveillance while discussing mechanisms to incorporate monitoring of SARS-CoV-2 in the same surveillance system. As COVID-19 becomes
endemic, the sentinel surveillance system that countries have put in place for influenza as a part of GISRS will become even more important to global health security.

Dr Vandelaer encouraged Member States to continue to think about how the systems they have currently in place could be expanded to incorporate monitoring of more pathogens of respiratory infections of pandemic potential. He reiterated that there is a good foundation for such surveillance and that has been demonstrated throughout the pandemic. He was optimistic that the influenza surveillance community can be more ambitious and use the platform more widely.

3. Conclusions and recommendations

3.1 Conclusions

(1) Participants of the Fourteenth Biennial Meeting of national influenza centres and influenza surveillance in the WHO Western Pacific and South-East Asia Regions acknowledged that despite existing challenges, 18 months into the pandemic (at the time of reporting), Member States of the WHO SE Asia and Western Pacific regions have adapted their national ILI and SARI sentinel surveillance systems to monitor transmission of SARS-CoV-2 virus with a view to synergizing with multisource surveillance for responding to public health threats of COVID-19 and simultaneously sustaining influenza sentinel surveillance.

(2) The restoration of functionality of overwhelmed ILI/SARI sentinel surveillance systems in the context of the pandemic was evident in recent detection of re-emergence of seasonal influenza at low levels in some Member States in the two regions and continued detection of human cases of zoonotic influenza during the pandemic in some countries in Asia-Pacific.

(3) The considerable progress of Member States in strengthening IHR core capacities under the overall biennial framework of APSED III for the implementation of International Health Regulations (2005) in detection, prevention and control of public health threats, including influenza, and specific investments in influenza system strengthening, implemented under pandemic influenza preparedness (PIP) and other initiatives, have been pivotal to the biennial response to COVID-19.

(4) It was also highlighted that lessons identified during the response to COVID-19 will be useful and beneficial and strengthen future pandemic influenza preparedness and response in the two regions.

(5) Member States noted that there were common challenges to sustaining influenza surveillance during the pandemic across Member countries in both the regions, including repurposing of resources, redeployment of personnel, prioritization of COVID-19 response, overwhelmed laboratory systems, procurement of laboratory reagents and consumables and issues of specimen transport to the NICs. In this context, the technical support and resources of the GISRS network consisting of WHO collaborating centres, national influenza centres and partners proved crucial for overcoming these challenges.
The participants elaborated on the need for identifying common priorities for further enhancing integrated monitoring of SARS-CoV-2 and influenza surveillance with an enhanced focus on surveillance quality, including the quality of laboratory samples and disaggregated sentinel and non-sentinel (where applicable) surveillance data.

The meeting concluded that while enhanced focus on integrated monitoring of SARS-CoV-2 and influenza surveillance leveraging GISRS had started to demonstrate effectiveness in monitoring influenza in the context of COVID-19, there was a need for complementing routine indicator-based sentinel surveillance with well-functioning, event-based surveillance in the context of strict implementation of PHSM.

Against the background of increased transmission of COVID-19, its multiple waves and increased use of vaccines, the meeting concluded that the landscape of the changing dynamics of the pandemic called for using the evolving epidemiological scenario of SARS-CoV-2 transmission to advocate for leveraging influenza surveillance systems in the countries for trend monitoring of SARS-CoV-2 while sustaining influenza sentinel surveillance.

The meeting highlighted the importance of experiences, successes, challenges and lessons identified during implementation of national COVID-19 response plans, strategic preparedness and response plans for COVID-19 and pandemic vaccine deployment plans for updating national influenza pandemic preparedness plans, including national influenza pandemic vaccine deployment plans.

The meeting highlighted major challenges faced by laboratory systems during COVID-19 response. Opportunities were identified to build and strengthen genomic sequencing capacity, including genomic surveillance, to respond to future pandemics and other public health threats. Technical support from WHO and partners is needed to support Member States in this regard.

It was noted that zoonotic influenza remains a significant public health threat in both the WHO regions. Therefore, strengthening “One Health” platforms and collaboration between animal and human health sectors at the country and regional levels in Asia-Pacific were seen as vital to prepare for and respond to zoonotic influenza outbreaks in order to prevent spill-overs and control further spread and human-to-human transmissions once the spillovers occur.

The solid foundation of avian influenza surveillance systems in Asia-Pacific was highlighted as an opportunity to strengthen surveillance of other zoonotic influenza viruses, using the integrated surveillance systems approach.

The meeting expressed concerns regarding possible re-emergence of seasonal influenza as international travel restrictions and PHSM in countries would be relaxed, despite the fact that seasonal influenza viruses have circulated at significantly reduced levels since the end of the first quarter of 2020. It was reminded that the preparedness for such resurgence is essential to ensure that the already stretched health systems will not be overburdened in the event of cocirculation of seasonal influenza and SARS-CoV-2.
(14) It was concluded that sharing of influenza viruses, clinical specimens and genetic sequencing data by Member States remains a high priority even in periods of low influenza circulation with a view to informing the influenza vaccine composition for the Northern and Southern Hemisphere seasonal influenza vaccines.

3.2 Recommendations

This set of recommendations recognizes the disruptions in influenza surveillance the pandemic has caused and suggests a refocus on influenza surveillance fundamentals to ensure continuing and consistent surveillance of influenza while integrating COVID-19 sentinel surveillance with influenza surveillance, where possible.

(1) ILI and SARI surveillance

All Member States are encouraged to focus on the basics of influenza surveillance to sustain and strengthen their current influenza surveillance system (ILI and SARI) in the face of disruptions that may have been caused by the ongoing pandemic. Member States should strive to achieve a surveillance system that produces consistent, representative and quality epidemiological and laboratory data. In the longer term, this system can then be leveraged to monitor trends of SARS-CoV-2 transmission in a standardized manner in Member States.

In the context of the pandemic-driven impacts on the functionality of ILI and SARI surveillance, Member States are advised to look at innovative surveillance mechanisms for COVID-19, established in their respective country and in other countries, as an opportunity and use them to strengthen their national influenza surveillance systems.

Where feasible, Member States are requested to test the WHO-recommended minimum of 100 samples per week for influenza through their surveillance systems to ensure detection of a positivity rate of at least 2%. Where this is not possible through ILI/SARI sentinel surveillance systems, Member States may (1) develop a system where COVID-19-negative samples, compatible with existing ILI/SARI case definitions, are tested randomly and representatively for influenza and/or (2) collect samples from non-sentinel surveillance sites. However, Member States are reminded to proceed carefully with non-sentinel sample collections to avoid biases and disaggregate non-sentinel surveillance data from sentinel surveillance data, when uploaded to the WHO global online data-sharing platform (FluMart).

(2) Laboratory diagnostics

Member States are requested to re-focus on influenza laboratory basics to ensure that they are not overrun by COVID-19 testing. In a timely manner, Member States should (1) test a sufficient number of samples to ensure sensitivity of surveillance system; (2) ensure that laboratory detection results are uploaded to FluNet and WHO COVID-19 databases and sequencing data is uploaded to GISAID; and (3) share influenza-positive samples and isolates with WHO CCs to allow analysis prior to vaccine consultation meetings conducted in February and
September each year (given the current low circulation of influenza, Member States are requested to share all possible samples/isolates with WHO CCs).

Where there are no NICs, Member States should consider utilization of multiplex-real-time PCR kits that allow for simultaneous detection of SARS-CoV-2 and influenza A and B and a sampling control such as RNase P [e.g. the CDC SARS-CoV-2–influenza RT-PCR kit, which is available via International Reagent Resources (IRR)], at least for a proportion of samples. Member States are requested to use multiplex kits only for surveillance purposes, and not for routine laboratory diagnosis.

Where feasible, national public health laboratories that do not currently have genomic sequencing capacity (for influenza or SARS-CoV-2) should discuss with WHO country and regional offices the potential for capacity-building to introduce appropriate genomic sequencing technologies for these countries in the near future, taking a step-by-step approach.

In the longer term, Member States should systematically plan to investigate the expandability of their respiratory virus sample-testing algorithms and testing platforms to include detection of more respiratory viruses, e.g. respiratory syncytial virus, human metapneumovirus, adenovirus and coronavirus.

(3) Data management, data sharing and data use for evidence-informed decision-making

Member States are requested to continue/resume reporting of influenza-specific epidemiological and laboratory data to FluNet/FluID, and to ensure completeness and timeliness of data (ideally, each week’s data should be reported by the following Thursday). Where relevant, the same should be implemented for SARS-CoV-2 data generated through influenza sentinel surveillance sites.

Member States are requested to focus on the quality of sentinel surveillance data (influenza/COVID-19) over their quantity and to report data disaggregated as sentinel or non-sentinel surveillance sites. They are encouraged to seek technical support of WHO-SEARO and WHO-WPRO, and key partners, where needed.

National influenza programmes of Member States in the two regions are encouraged to develop plans to establish or strengthen local influenza- and other respiratory pathogen (where relevant)-specific clinical/epidemiological/laboratory data analysis for evidence-based decision-making, and to provide regular feedback from national to subnational levels, including sentinel surveillance sites.

(4) Zoonotic influenza

Member States are requested to strengthen the operationalization of national “One Health” platforms for advancing and sustaining surveillance for emerging infectious diseases at the human-animal interface for early detection, risk assessment and timely response to zoonotic influenza.
(5) **Pandemic influenza preparedness**

Based on lessons learned from COVID-19 vaccine deployment, Member States are requested to plan for updating their influenza vaccine deployment plan, taking a whole government approach as a part of national influenza pandemic preparedness plans (NIPPP) at regular intervals.

Member States are requested to update national pandemic influenza preparedness plans, based on lessons learned from the COVID-19 response and using APSED principles with a view to continuing strengthening of core public health capacities at national and subnational levels to respond to influenza outbreaks and pandemics.

Member States are also encouraged to regularly exercise pandemic preparedness plans to identify gaps and facilitate continuous refining of plans for effectively responding to future influenza pandemics.

**Recommendations to WHO**

(1) **ILI and SARI surveillance**

WHO is requested to advocate to the highest levels of government the importance of strengthening and sustaining influenza surveillance system for alert, early warning and response for influenza of pandemic potential, as part of an overall national respiratory virus-borne infectious disease surveillance system that monitors influenza and one or more other viruses of epidemic/pandemic potential. WHO-SEARO and WHO-WPRO are advised to use all possible opportunities for the advocacy referred to above. WHO is cognizant of the burden that will be imposed by such a measure on the already overwhelmed laboratories. Hence, Member States are requested to adopt a feasible approach for expansion.

WHO is requested to document and share documented information on (1) best practices for maintaining and sustaining influenza sentinel surveillance in the context of SARS-CoV-2; (2) adaptation of sentinel surveillance in GISRS to monitor SARS-CoV-2 virus; (3) the use of national influenza centre capacity for rapid adaptation to SARS-CoV2 diagnosis; and (4) the impact of SARS-CoV-2 on influenza-specific laboratory testing and epidemiology/laboratory data management, including data reporting to the WHO global data-sharing platform (FluMart).

(2) **Laboratory diagnosis**

WHO-SEARO and WHO-WPRO along with the Global Influenza Programme, WHO country offices, WHO collaborating centres for influenza and partners are requested to utilize the capacity, technical expertise and infrastructure existing within GISRS and beyond to support Member States to strengthen genomic sequencing capacity, including genomic surveillance in the two WHO regions to respond to future pandemics and other public health threats.
(3) **Data management, data sharing and data use for evidence-informed decision-making**

WHO-SEARO and WHO-WPRO in collaboration with the Global Influenza Programme are requested to provide monthly summaries of reporting status to the FluMart and monthly epidemiological and laboratory surveillance information to Member States.

WHO is requested to work with Member States in the two regions, together with partners, to invest in data training, information technology and development of human resources (staff) required for influenza data management and build robust influenza data management systems that systematically collect data, enabling more automatic exchange of data.

(4) **Zoonotic influenza**

WHO is requested to work with tripartite and other “One Health” partners to support the development and evaluation of novel methods, including field diagnostics with involvement of Member States to enhance early detection, characterization and timely sharing of information and samples to allow risk assessment of animal influenza viruses and subsequent actions.

(5) **Pandemic influenza preparedness**

Member States, WHO and other partners are requested to work together to document and share best practices, such as regulatory preparedness, development of vaccine deployment plans, systems, delivery platforms, etc., for COVID-19 vaccination at the country level in the Western Pacific Region and the South-East Asia Region, which could be used to improve influenza pandemic vaccine deployment planning as a part of NIPPP and deployment in future, and the secretariat is requested to make a presentation to the NIC in 2023.

Based on the lessons learned from the COVID-19 response, WHO is requested to support Member States to update and implement national influenza pandemic preparedness plans while, at the same time, supporting the Member States to strengthen resilient systems of public health to respond to other emergencies, with approaches such as biregional APSED’s two-tier approach within broader initiatives, carried out at the regional level.

**Recommendations to partners**

(1) **Laboratory diagnosis**

Partners are requested to collaborate with WHO-SEARO and WHO-WPRO to support Member States in their efforts to strengthen genomic sequencing capacity, including genomic surveillance, in the two WHO regions to respond to future pandemics and other public health threats.

Partners should consider support to Member States with multiplex-real-time PCR kits that allow the simultaneous detection of SARS-CoV-2 and influenza A and B and a sampling control such as RNase P (e.g. the CDC SARS-CoV-2–influenza RT-PCR kit, which is available via IRR) for surveillance purposes.
(2) **Zoonotic influenza**

Tripartite and other “One Health” partners, together with WHO, are requested to support the development and evaluation of novel methods, including field diagnostics to enhance early detection, characterization and timely sharing of information and samples to allow risk assessment of animal influenza viruses and subsequent actions.

(3) **Pandemic influenza preparedness**

Partners, together with WHO, are requested to support Member States to document and share best practices, such as regulatory preparedness, development of vaccine deployment plans, systems, delivery platforms, etc., for COVID-19 vaccination at the country level in the WHO Western Pacific and South-East Asia Regions.
Annex 1

Programme of activities

Day 1: Tuesday, 17 August 2021

Opening session

Introduction to the opening session

Dr Pushpa Ranjan Wijesinghe
Programme Area Manager (Infectious Hazard Management)
WHO Regional Office for South-East Asia (WHO-SEARO)

Chair of the opening session:

Dr Jos Vandelaer
Regional Emergency Director
WHO Regional Office for South-East Asia (WHO-SEARO)

Opening remarks (video presentation)

Dr Poonam Khetrapal Singh
WHO Regional Director for South-East Asia

Self-introductions

Nomination of Chair and co-Chair

Chair for the meeting: Dr Vivi Setiawaty, Director for Research and Development of Biomedical and Basic Health Technology, Ministry of Health, Indonesia

Plenary 1: Review of influenza trends and update on influenza related activities

Session moderator: Dr Kanta Subbarao, Director, WHO Collaborating Centre, VIDRL, The Peter Doherty Institute, Australia

An update on developments of GiSRS+
Dr Ann Moen, WHO HQ

Influenza trends and activities in SE Asia and Western Pacific regions
Mr Francis Inbathan, WHO-SEARO

Influenza activity in the Northern Hemisphere
Dr Hideki Hasegawa, Director, WHO Collaborating Centre, National Institute of Infectious Diseases, Japan

Influenza activity in the Southern Hemisphere
Dr Ian Barr, Deputy Director, WHO Collaborating Centre, VIDRL, The Peter Doherty Institute, Australia
Plenary 2: Review of ILI and SARI surveillance – challenges and experiences in SEA/Western Pacific Region countries in the context of COVID-19

Session moderator: Dr Joshua Mott, Director, US CDC Thailand office
Country presentations from Cambodia, Nepal, Vietnam, Indonesia, Timor-Leste

Day 2: Wednesday, 18 August 2021

Plenary session 3: Key priority activities for integrating sentinel surveillance for influenza with SARS-CoV-2 and introduction of GISRS+

Session moderator: Dr Vivi Setiawaty, Director for Research and Development of Biomedical and Basic Health Technology Ministry of Health, Indonesia

Dr Wenqin Zhang, Unit Head, Global Influenza Programme (GIP), WHO HQ
Introductory presentation

Dr Manish Kakkar, SEARO
Instructions for breakout sessions

Breakout sessions

Laboratory diagnosis
Moderator: Dr Ian Barr, Deputy Director, WHO Collaborating Centre, VIDRL, The Peter Doherty Institute, Australia

Surveillance
Moderators: Dr Siddhartha Saha, Director, Influenza Programme, US CDC, India, and Dr Katelijn Vandemeule, GIP, WHO-HQ

Data management
Moderator: Dr Julia Fitzner, GIP, WHO-HQ

Plenary session 4: COVID-19 pandemic vaccine deployments – SEA and Western Pacific Region countries

Session moderator: Dr Vivi Setiawaty, Director for Research and Development of Biomedical and Basic Health Technology, Ministry of Health, Indonesia

Country presentations: Mongolia, Bhutan, Philippines

Day 3: Thursday, 19 August 2021

Plenary session 5: Key priority activities for integrating sentinel surveillance for influenza with SARS-CoV-2

Session moderator: Dr Vivi Setiawaty, Director for Research and Development of Biomedical and Basic Health Technology, Ministry of Health, Indonesia
Plenary session 6: COVID-19 pandemic vaccine deployments – SEA and Western Pacific Regional Office perspective

Session moderator: Dr Vivi Setiawaty, Director for Research and Development of Biomedical and Basic Health Technology Ministry of Health, Indonesia

WPRO: Dr Nyambat Batumunkh, VID, WPRO
SEARO: Dr Emmanuel Njambe, IVD, SEARO

Plenary session 7: Zoonotic influenza

Session moderators: Dr Richard Webby, Directory, WHO Collaborating Centre, St Jude Children’s Research Hospital, USA, and Dr Lesa Thompson, Regional Project Officer, Regional Representation for OIE in Asia and the Pacific

Zoonotic influenza: a global update

Dr Katelijn Vandamaele, GIP, WHO HQ

FAO’s regional priorities on zoonotic influenza

Dr Fili Claes, Regional Laboratory Coordinator, FAO

Conclusions and recommendations

Closing remarks

Dr Jos Vandalaer, Regional Emergency Director, WHO-SEARO
Annex 2

Opening address by Dr Poonam Khetrapal Singh,
WHO Regional Director for South-East Asia

Distinguished participants from the WHO South-East Asia and Western Pacific regions, experts from WHO collaborating centres, partners and colleagues, good morning to all and a very warm welcome to this Fourteenth Biregional Meeting of national influenza centres and influenza surveillance.

For more than 19 months now the WHO South-East Asia and Western Pacific regions, as all WHO regions, have been responding to the COVID-19 pandemic. Amid the emergence and spread of new variants of concern, we continue to pull out all stops to control the spread, save lives and minimize impact, and continue to protect against existing health threats. One such threat is influenza, which affects every country, and can be severe or fatal for some risk groups.

The co-circulation of SARS-CoV-2 and influenza has the potential to further strain health systems that are already overwhelmed due to the pandemic. As the world races to discover antivirals against SARS-CoV-2, and to roll out COVID-19 vaccines, we can be grateful for the tools we already have against flu, which include effective antivirals and vaccines.

The same public health and social measures that are being implemented to control COVID-19 are equally effective for influenza control. Globally, the monitoring of seasonal influenza viruses and influenza viruses of pandemic potential is based on data and viruses shared with WHO’s Global Influenza Surveillance and Response System, or GISRS. So are the recommendations for the composition of influenza vaccines and the development of global policies.

The GISRS system has functioned since 1952, and I thank all countries in the Asia-Pacific for participating in and contributing to it.

Over the last decade, significant investments have been made in influenza pandemic preparedness and response and influenza system strengthening. Across the South-East Asia and Western Pacific regions, the COVID-19 response has greatly benefited from the readiness of PCR capacity within national influenza laboratories, in addition to the infrastructure and human resources that Member States have built over the course of many years, and to which our partners and collaborating centres have contributed.

Although in the first quarter of 2020 we witnessed a 79% global decline in the testing of samples for influenza viruses, available data indicate that the overall number of tests in 2020 was no lower than in previous years – a testament to the efforts of GISRS.
And yet, globally, in 2020 we witnessed a 62% decrease in the number of virus shipments to WHO collaborating centres, and a 94% decrease in the number of influenza viruses with genetic sequence data uploaded to the GISAID database.

These decreases could be due to a range of factors, including a potential reduction in annual circulation of influenza viruses, the repurposing of staff and supplies, overburdened laboratories, and transport restrictions.

To better understand and overcome any and all challenges, and to continue to strengthen the GISRS, it is essential that countries and partners identify and share lessons learned – precisely as you are gathered to do.

Having considered the potential impact such challenges could have, WHO has developed a policy brief on readiness for influenza amid the pandemic and has also issued interim guidance on how to maintain influenza surveillance while monitoring SARS-CoV-2 through the GISRS.

In addition, to ensure the optimal use of vaccines when supply is limited, WHO’s Strategic Advisory Group of Experts on Immunization has issued recommendations on the prioritization of seasonal influenza immunization.

In the coming deliberations, you have a chance to share experiences of COVID-19 vaccine deployment, and to leverage those experiences to help shape preparedness for future pandemic influenza vaccine deployments.

I urge you to make the most of this opportunity and reiterate WHO’s full and ongoing support to Member States in the COVID-19 response, and in enhancing influenza preparedness and response capacity, for a healthier, and more health secure, Asia-Pacific for all. I wish you all a successful meeting. Thank you.
# Annex 2

## List of participants

### SEA Region Member States

**Bangladesh**

- **Professor Dr Tahmina Shirin**
  - Director
  - IEDCR, DGHS
  - MoHFW
  - Dhaka, Bangladesh
  - Email: tahmina.shirin14@gmail.com
- **Dr Manjur Hossain Khan Jony**
  - IEDCR, DGHS
  - MoHFW
  - Dhaka, Bangladesh
  - Email: dr.manjur@iedcr.gov.bd
- **Dr ASM Alamgir**
  - Principal Scientific officer
  - IEDCR, DGHS
  - MoHFW
  - Dhaka, Bangladesh
  - Email: dr.alamgir@iedcr.gov.bd

**Bhutan**

- **Mr Binay Thapa**
  - Chief Laboratory Officer
  - RCDC, Department of Public Health
  - Ministry of Health,
  - Thimphu, Bhutan
  - Email: bthapa@health.gov.bt
- **Mr Tshewang Dorji**
  - Assistant Program Officer
  - CDD, Department of Public Health,
  - Ministry of Health,
  - Thimphu, Bhutan
  - Email: tshewangdorji1@health.gov.bt

**India**

- **Dr Pranay Verma**
  - Joint Director (CSU, IDSP)
  - Ministry of Health and Family Welfare
  - Government of India
  - New Delhi
  - Email: pranay.verma@gov.in
- **Dr Simrita Singh**
  - JD & OIC (NCDC)
  - Ministry of Health and Family Welfare
  - Government of India
  - New Delhi
  - Email: simrita405@gmail.com
- **Dr Varsha Potdar**
  - Scientist ‘D’ & Influenza group leader
  - ICMR- National Institute of Virology
  - National Influenza centre
  - Ministry of Health & Family welfare
  - India
  - Email: potdarvarsha9@gmail.com

**Indonesia**

- **Dr dr. Vivi Setiawaty, M.Biomed**
  - Director for Research and Development of Biomedical and Basic Health Technology
  - Ministry of Health
  - Republic of Indonesia
  - Email: vilitbang@yahoo.com
- **Dr Ni Ketut Susilarini**
  - Head of Infleuence Like Illness and Severe Acute Respiratory Infection Researcher, Ministry of Health
  - Republic of Indonesia
  - Email: niketutsusi@gmail.com
- **Dr Eka Muhiriyah, SKM, MKM**
  - Epidemiologist
  - Ministry of Health
  - Republic of Indonesia
  - Email: ekamuhiriyah@yahoo.com; niketutsusi@gmail.com
- **Dr Rohani Simanjuntak, SKM, MKM**
  - Epidemiologist, Subdit Acute Respiratory Infection
  - Ministry of Health
  - Republic of Indonesia
  - Email: hani4juli@yahoo.com
- **Dr Alfinella Izhar Iswandi, MPH**
  - Sub coordinator pneumonia, Subdit Acute Respiratory Infection, Ministry of Health
  - Republic of Indonesia
  - Email: ella_doct@yahoo.com

**Maldives**

- **Dr Ibrahim Afzal,**
  - Epidemiologist
  - Health Protection Agency
  - Maldives
  - Email: afzal@health.gov.mv; afzalnow@gmail.com
- **Ms Sarah Jamal**
  - Senior Public Health Programme Officer
  - Health Protection Agency
  - Maldives
  - Email: sarah@health.gov.mv
14th Bi-Regional Meeting of National Influenza Centers (NICs) and Influenza Surveillance in the WHO’s South-East Asia and Western Pacific Regions

Ms Ramsha Abdul Sattar
Project Coordinator
Health Protection Agency
Maldives
Email: ramsha@health.gov.mv

Ms Aminath Nazfa,
Senior Laboratory Technician
Indhira Gandhi Memorial Hospital
Maldives
Email: a.naxpha@gmail.com

Nepal
Dr Runa Jha
Director,
National Public Health Laboratory
Kathmandu, Nepal
Email: Runa75jha@gmail.com

Ms Lilee Shrestha Sharma
Chief Medical Technologists
National Public Health Laboratory
Kathmandu, Nepal
Email: shresthalilee@gmail.com

Mr Bhim Prasad Sapkota
Senior Public Health Administrator
Ministry of Health and Population
Kathmandu, Nepal
Email: bhimprasadsapkota@gmail.com

Sri Lanka
Dr CJS Jayamaha
Consultant Virologist,
Medical Research Institute,
Ministry of Health
Sri Lanka
Email: jayamaha@car.com

Dr Chinthana Perera
Consultant epidemiologist,
Ministry of Health
Sri Lanka
Email: pchimerera@yahoo.com

Thailand
Dr Pilailuk Akkapaiiboon Okada
Medical Technologist,
Senior Professional Level
National Institute of Health
Department of Medical Sciences
Ministry of Public Health
Thailand
Email: pilailuk.o@dmsc.mail.go.th; pilailuk.o@gmail.com

Dr Teerasak Chuxnum
Veterinarian, senior professional level
Division of Epidemiology,
Department of Medical Sciences
Ministry of Public Health
Nonthaburi, Thailand
Email: tchuxnum@yahoo.com

Timor-Leste
Dr Endang Soares da Silva
Executive Director,
National Health Laboratory,
Ministry of Health,
Dili, Timor-Leste
Email: chrisnasha2321@gmail.com

Dr Filipe de Neri Machado
Head of Surveillance
Ministry of Health,
Dili, Timor-Leste
Email: machado.26587@gmail.com

WHO Secretariat

Country Offices

Bangladesh
Dr Kazi Mohammad Hassan Ameen
National Consultant
Country Office for Bangladesh
Email: ameenk@who.int

DPR Korea
Ms Anupurba Roy Chowdhury
Technical Officer (Lab. Specialist)
Country Office for DPR Korea
Email: roya@who.int

India
Dr Pavana Murthy
National Professional Officer
Country Office for India
Email: murthyp@who.int

Dr Ritu Singh Chauhan
National Professional Officer
Country Office for India
Email: chauhanr@who.int

Indonesia
Dr Endang Wulandari
National Professional Officer
Country Office for Indonesia
Email: wulandarie@who.int
Ms Tina Kusumaningrum  
National Professional Officer  
Country Office for Indonesia  
Email: kusumaningrumt@who.int

**Maldives**

Dr Faiha Ibrahim  
National Professional Officer (Emergencies, AMR, Food Safety and IHR)  
Country Office for Maldives  
Email: ibrahimf@who.int

**Nepal**

Dr Arunkumar Gonvidakarnavar  
Technical Officer (Public Health Lab.)  
Country Office for Nepal  
Email: govindakarnavara@who.int

Dr Subash Neupane  
National Professional Officer  
Country Office for Nepal  
Email: neupanesub@who.int

**Timor-Leste**

Maria Varela  
National Professional Officer  
Surveillance  
Country Office for Timor-Leste  
Email: varelama@who.int

**SEARO**

Dr Jos Vandelear  
Regional Emergency Director  
Email: vandelaejoe@who.int

Dr Pushpa Ranjan Wijesinghe  
Programme Area Manager (IHM)  
Contact: +919958994668  
Email: wijesinghep@who.int

Dr Dhamari Naidoo  
Public Health Laboratory Scientist  
SE/RGO/WHE  
Email: bezbbaruah@who.int

Dr Supriya Bezbaruah  
Technical Officer (Risk Communications)  
Email: bezbaruahs@who.int

Dr Manish Kakkar  
Technical Officer (High-Threat Pathogens)  
Email: kakkarm@who.int

Dr Tondo Opute Emmanuel Njambe  
Technical Officer (Immunization Vaccine Development)  
Email: emmanuelt@who.int

Dr Manisha Shridhar  
Technical Officer (IPT)  
Email: shridharm@who.int

Mr Tika Ram Sedai  
Technical Officer – Data Management  
Email: sedait@who.int

Mr Francis Yesurajan Inbanathan  
Technical Officer – Laboratory  
Email: inbanathanf@who.int

**Consultant**

Ms Olivia Hayley Price

**Headquarters**

Dr Ann Moen  
Chief  
HQ/WPE/GIH/GIP  
Email: moena@who.int

Dr Wenqing Zhang  
Unit Head  
HQ/WPE/GIH/GIP  
Email: zhangw@who.int

Dr Dmitriy Pereyaslov  
Team Lead  
HQ/WPE/GIH/GIP  
Email: pereyaslovd@who.int

Dr Katelijn A.h. Vandemaele  
Medical Officer  
HQ/WPE/GIH/GIP  
Email: vendemaelek@who.int

Dr Siddhivinayak Shriram Hirve  
Technical Officer  
HQ/WPE/GIH/GIP  
Email: hirves@who.int

Dr Julia Fitzner  
Medical Officer  
HQ/WPE/GIH/GIP  
Email: fitznerj@who.int

Dr Shoshanna Goldin  
Technical Officer  
HQ/WPE/GIH/IPR  
Email: goldins@who.int

Dr Christopher Chadwick  
Technical Officer  
HQ/PIP  
Email: chadwickc@who.int

Dr Gina Samman  
Team Leader  
HQ/PIP  
Email: samaang@who.int
Ms Jennifer Barragan Frommé
Project Manager
HQ/PIP
Email: barraganj@who.int

Ms Poonam Huria
Technical Officer
HQ/PIP
Email: sachdevap@who.int

Dr Hiiti Baran Sillo
Technical Officer
HQ/MHP/RPQ/REG/RSS

Dr Isabel Bergerii
Technical Officer
HQ/WPE/GIH/GIP

Dr Melinda Frost
Technical Officer
HQ/WPE/GIH/IEP

Dr Loana Ghiga
Technical Officer
HQ/WPE/GIH/IEP

Dr Sarah Hamid
Technical Officer
HQ

WPRO Member States

Australia
Dr Ian Barr
Deputy Director
Victorian Infectious Diseases Reference Laboratory
Doherty Institute
792 Elizabeth Street
Melbourne, Australia
Email: ian.barr@influenzacentre.org

Dr Julian Druce
Head, Virus Identification Laboratory
Victorian Infectious Diseases Reference Laboratory
792 Elizabeth Street
Melbourne 300, Australia
Email: julian.druce@mh.org.au

Dr Dominic Edmund Dwyer
Director, Virology Department
Institute of Clinical Pathology and Medical Research
Reserve Road, St. Leonards
New South Wales 2065
Australia
Email: dominic.dwyer@sydney.edu.au

Dr David William Smith
Virologist, Path West Laboratory Medicine WA
Locked Bag 2009, Nedlands 6909
Australia
Email: david.smith@health.wa.gov.au

Brunei Darussalam
Dr Nurul Huda Jeludin
Medical Officer
Disease Control Division
Ministry of Health
Commonwealth Drive
Bandar Seri Begawan 9910
Brunei Darussalam
Email: nurulhuda.jeludin@moh.gov.bn

Cambodia
Dr Seng Heng
Director, Surveillance Bureau
Communicable Disease Control Department
Ministry of Health
Penn Nouth Blvd.
Phnom Penh
Email: senghengmoh@gmail.com

Mr Chin Savuth
Vice-Chief of Laboratory
National Institute of Public Health
Samdach Penn Nouth Street
Phnom Penh
Email: savuth_chin@niph.org.kh

Dr Erik Karlsson
Director, National Influenza Centre Pasteur du Cambodge
P.O. Box 983
Phnom Penh
Email: ekarlsson@pasteur-kh.org

People’s Republic of China
Dr Chen Tao
Associate Professor
Chinese National Influenza Center
Chinese Center for Disease Control and Prevention
Changhai Road
Changping Road
Beijing 102206
Email: chentao@cnic.org.cn

Dr Zhibin Peng
Director, Branch of Respiratory Infectious Diseases
Division of Infectious Diseases
Chinese Center for Disease Control and Prevention
Changhai Road
Changping Road
Beijing 102206
Email: pengzb@chinacdc.cn
Hong Kong (SAR)
Dr Leung Mei Hung
Senior Medical and Health Officer
Surveillance Division
Communicable Disease Branch
Department of Health
Queen’s Road East
Wan Chai
Email: smo_sur2@dh.gov.hk

Dr Ng Ho Leung
Consultant, Microbiology Division
Public Health Laboratory Services Branch
Department of Health
Queen’s Road East
Wan Chai
Email: ken_hl_ng@dh.gov.hk

Japan
Dr Yuzo Arima
Technical Officer (Surveillance)
Center for Surveillance, Immunization, and Epidemiological Research
National Institute of Infectious Diseases
1-23-1 Toyama, Shinjuku
Tokyo 162-8640, Japan
Email: arima@niid.go.jp

Dr Shinji Watanabe
Chief, Center for Influenza and Respiratory Virus Research
National Institute of Infectious Diseases
4-7-1 Gakuen, Musashi-Murayama
Tokyo 208-0011
Email: shw@nih.go.jp

Lao People’s Democratic Republic
Ms Bouaphanh Khamphaphonghane
Chief, Epidemiology Division
Ministry of Health
Km 3, Thadue Road
Vientiane
Email: bkhamphaphonghane@gmail.com

Dr Viengsavanh Kittiphong
Chief, Surveillance Division
Department of Communicable Diseases Control
Ministry of Health
Simuang Road, Sisatanak District
Vientiane
Email: fcfornai@gmail.com

Malaysia
Dr Ravindran Thayan
Head, Virological Unit
Institute for Medical Research
Ministry of Health
Putrajaya
Email: ravin@imr.gov.my; rthayan@gmail.com

Dr Chan Yoke Fun
Associate Professor
Department of Medical Microbiology
Faculty of Medicine
University Malaya
Kuala Lumpur
Email: chanyf@um.edu.my

Dr Noorhaire Sumarlie bin Nordin
Senior Principal Assistant Director
Family Health Development Division
Ministry of Health
Parcel E, Block E10
Putrajaya
Email: drnoorhaire@moh.gov.my

Dr Aznida binti Mohamad Zaki
Assistant Director
Disease Surveillance Sector
Disease Control Division
Ministry of Health
Government Complex E,
Putrajaya
Email: draznida@moh.gov.my

Mongolia
Dr Darmaa Badarch
Head, Virology Department
Ministry of Health
NCCD Campus Bayanzurkh District
Ulaanbaatar
Email: darmaanicmn@gmail.com

Dr Baigalmaa Jantsansengee
Deputy Director
Communicable Disease Surveillance
National Centre for Communicable Diseases
NCCD Campus Bayanzurkh District
Ulaanbaatar
Email: j.baigalmaa@ncdc.gov.mn

Dr Battur Tariat Lkhagvaa
General Director
National Centre for Communicable Diseases
Bayanzurkh District, Nam Yan Ju Street
Ulaanbaatar
Email: l.battur@ncdc.gov.mn

New Zealand
Mr Jared Solloway
Senior Adviser for Immunization
(Population Health & Prevention)
New Zealand Ministry of Health
Molesworth Street Thorndon
Wellington 6011
Email: jared.solloway@health.govt.nz
Papua New Guinea
Ms Vienna Lafiana Nonwo
Technical Officer
Immuniaable Disease Surveillance and Data Officer, Public Health
National Department of Health
Waigani, ADPI Centre
Email: nonwovienna@gmail.com

Mr Barry Ropa
Program Manager
Surveillance and Emergency Response
Ministry of Health
Waigani
Email: Bropa2013@gmail.com

Philippines
Dr Alethea R. De Guzman
OIC-Director III
Epidemiology Bureau
Department of Health
San Lazaro Compound, Rizal Avenue
Sta. Cruz, Manila
Email: aletheardeguzman@gmail.com

Dr Mayan U. Lumandas
Medical Specialist IV
Virology Department
Research Institute for Tropical Medicine
9002 Research Drive
Filinvest Corporate City
Alabang, Muntinlupa
Email: maylumandas@gmail.com

Republic of Korea
Dr Eun-Jin Kim
Director, Division of Emerging Infectious Diseases
Korea Disease Control and Prevention Agency
Cheongju-Si 28159
Email: ekim@korea.kr

Dr Heui Man Kim
Staff Scientist
Division of Emerging Infectious Diseases
Korea Disease Control and Prevention Agency
Cheongju-si
Email: animal80@korea.kr

Singapore
Dr Raymond Tzer Pin Lin
Director
National Public Health Laboratory
National Centre for Infectious Diseases
Ministry of Health
16 Jalan Tan Tock Seng
Singapore 308442
Email: Raymond_Lin@moh.gov.sg

Ms Wei Long Shanice Teo
Public Health Officer
Communicable Diseases Division
(Surveillance, Epidemiology and Response Branch)
Ministry of Health
16 College Road
College of Medicine Building
Singapore 169854
Email: Shanice_teo@moh.gov.sg

Viet Nam
Dr Dang Van Chinh
Director
Institute of Public Health
Ministry of Health
Hung Phu Street
District 8, Ho Chi Minh City
Email: cdang2004@yahoo.com

Dr Le Thi Quynh Mai
Researcher, Virology Department
National Institute of Hygiene and Epidemiology
No. 1 Yersin Street, Hanoi
Email: nihe@nihe.org.vn

Dr Nguyen Thanh Long
Director
National Institute of Hygiene and Epidemiology
Pasteur Institute
Ho Chi Minh City

Dr Nguyen Thi May Hanh
General Department of Preventive Medicine
Ministry of Health

Dr Phu Dinh Vu
Head, Intensive Care Unit
National Hospital for Tropical Diseases
Gai Phong Road, Dong DA District
Hanoi
Email: vudingphu07@gmail.com

Temporary Advisers
Dr Hideki Hasegawa
Director
Center for Influenza and Respiratory Virus Research
National Institute of Infectious Diseases
Gakuen Musashimurayam-shi
Tokyo, Japan
Email: hasegawa@nih.go.jp

Dr Kanta Subbarao
Director
Victorian Infectious Diseases Reference Laboratory
Melbourne, Australia
Email: kanta.subbarao@influenzacentre.org
14th Bi-Regional Meeting of National Influenza Centers (NICs) and Influenza Surveillance in the WHO’s South-East Asia and Western Pacific Regions

Dr Wang Dayan  
Director of Chinese National Influenza Centre  
WHO Collaborating Centre for Reference and Research on Influenza  
Chinese Center for Disease Control and Prevention  
Changbai Road, Changping District  
Beijing, China  
Email: wangdayan.ivde.chn.cdc.cn

Dr David Wentworth  
Chief, Virology Surveillance and Diagnosis Branch  
WHO Collaborating Centre for Surveillance, Influenza Division  
Clifton Road, Atlanta, GA 30329-4027  
Email: DWentworth@cdc.gov; gll9@cdc.gov

Observers/Representatives

Cambodia

Dr Yong Vuthikol  
Deputy Program Manager  
National Immunization Program  
Samdach Penn Nouth Street  
Phnom Penh  
Email: yongvuthikol@gmail.com

Republic Of People’s Democratic Lao

Dr Phoupasong Somphou  
Chief, Zoonotic Diseases and Points of Entry Division  
Department of Communicable Diseases Control  
Ministry of Health  
Ban Thatkhao, Ryue Simeuang  
Sisattanak District  
Vientiane  
Email: tspdo!@yahoo.com

Republic of Korea

Dr Dong Han Lee  
Division of Infectious Diseases Control  
Korea Disease Control and Prevention Agency  
Osongaengnywong 2-ro  
Heungdeok-gu, Cheongju-si  
Email: ldhmd@korea.kr

Mrs Nam-Joo Lee  
Division of Emerging Infectious Disease Control  
Korea Disease Control and Prevention Agency  
Email: njlee@korea.kr

Dr Hyeong Il Jeon  
Division of Infectious Diseases Control  
Korea Disease Control and Prevention Agency  
Osongaengmyeong 2-ro  
Osong-eup, Heungdeok-gu  
Cheongju-si  
Email: ilcheun7@korea.kr

Singapore

Dr Cui Lin  
Senior Public Health Officer  
Communicable Diseases Division (Surveillance, Epidemiology and Response Branch)  
Ministry of Health  
College Road, College of Medicine Building  
Singapore 1698542  
Email: Cui_lin@moh.gov.sg

US Centers for Disease Control

Dr Borann Sar  
Laboratory Specialist  
Influenza Program  
CDC Cambodia Country Office  
Bld. Pen Nuth, Toul Kork  
Phnom Penh  
Email: lez8@cdc.gov

Secretariat

WHO Regional Office for the Western Pacific

Dr Babatunde Olowokure  
Regional Emergency Director  
WHO Health Emergencies Programme  
Director, Division of Health Security and Emergencies  
World Health Organization  
Regional Office for the Western Pacific  
United Nations Avenue corner Taft Avenue  
Manila, Philippines  
Email: ołowokureb@who.int

Mr Nguyen Phuong Nam  
Technical Officer  
Pandemic Influenza Preparedness  
Infectious Hazard Management  
WHO Health Emergencies Programme  
World Health Organization  
Regional Office for the Western Pacific  
United Nations Avenue corner Taft Avenue  
Manila, Philippines  
Email: nguyenp@who.int
Dr Sangjun Moon
Medical Officer
Health Emergency Information and Risk Assessment
WHO Health Emergencies Programme
World Health Organization
Regional Office for the Western Pacific
United Nations Avenue corner Taft Avenue
Manila, Philippines
Email: smoon@who.int

Dr Nyambat Batmunkh
Vaccine-Preventable Diseases and Immunization
Division of Programmes for Diseases Control
World Health Organization
Regional Office for the Western Pacific
United Nations Avenue corner Taft Avenue
Manila, Philippines
Email: rrrubatmunkhn@who.int

WHO Cambodia
Mr Vanra Leng
World Health Organization
Country Office for Cambodia
Preah Norodom Blvd
Sangkat Boeung Keng Kang I, Khan Chamkamorn
Phnom Penh
Email: iengv@who.int

Dr Sarika Patel
World Health Organization
Country Office for Cambodia
Preah Norodom Blvd
Sangkat Boeung Keng Kang I, Khan Chamkamorn
Phnom Penh
Email: patelsa@who.int

Ms Philomena Raftery
Technical Officer
Division of Health Security and Emergencies
World Health Organization
Country Office for Cambodia
Preah Norodom Blvd
Sangkat Boeung Keng Kang I, Khan Chamkamorn
Phnom Penh
Email: praftery@who.int

WHO People’s Republic of China
Dr Lee Chin-kei
Medical Officer
Health Systems and Health Security Team
World Health Organization
Representative Office for China
Dongwai Diplomatic Office Building, 23
Dongzhimenwai Dajie, Chaoyang District
100600 Beijing
Email: LeeC@who.int

WHO Fiji
Mr Sean Casey
Acting Team Coordinator
Pacific Health Security &Communicable Diseases
Pacific Health Cluster Coordinator
Division of Pacific Technical Support (DPS)
World Health Organization
Provident Plaza One Downtown
Boulevard 33 Ellery Street
Suva
Email: scasey@who.int

Dr Elias Forbin
Designation
Division of Pacific Technical Support (DPS)
World Health Organization
Provident Plaza One Downtown
Boulevard 33 Ellery Street
Suva
Email: forbine@who.int

Ms Naidu Shakila
Division of Pacific Technical Support (DPS)
World Health Organization
Provident Plaza One Downtown
Boulevard 33 Ellery Street
Suva
Email: shakilan@who.int

Dr Subhash Yadav
Designation
Division of Pacific Technical Support (DPS)
World Health Organization
Provident Plaza One Downtown
Boulevard 33 Ellery Street
Suva
Email: syadav@who.int

WHO Lao PDR
Ms May Chiew
Technical Officer (Epidemiologist)
WHO Health Emergencies Programme
World Health Organization
Country Office for Lao People’s Democratic Republic
Saphanthong Road, Unit 5
Ban Saphanghontai, Sisattanak District
Vientiane Capital
Email: chiewm@who.int

Dr Phetdavanh Leuangvilay
World Health Organization
Country Office for Lao People’s Democratic Republic
Saphanthong Road, Unit 5
Ban Saphanghontai, Sisattanak District
Vientiane Capital
Email: leuangvilayp@who.int
Dr Sonesavanh Phimmasine  
Technical Officer  
WHO Health Emergencies Programme  
World Health Organization  
Country Office for Lao People’s Democratic Republic  
Saphanthong Road, Unit 5  
Ban Saphanthongtai, Sisattanak District  
Vientiane Capital  
Email: phimmasines@who.int

WHO Malaysia  
Dr Karina Razali  
World Health Organization  
Country Office for Malaysia  
4th Floor, Prima 8, Block 3508  
Jalan Teknokrat 6, 63000 Cyberjaya  
Selangor  
Email: razalik@who.int

WHO Mongolia  
Dr Dulamragchaa Buyanbaatar  
SSA, Health emergencies  
WHO Health Emergencies Programme  
World Health Organization  
Country Office for Mongolia  
Government Building No. 8  
Ulaanbaatar  
Email: buyanbaatard@who.int  

Dr Gerelmaa Danzan  
SSA, Laboratory and Logistics  
WHO Health Emergencies Programme  
World Health Organization  
Country Office for Mongolia  
Government Building No. 8  
Ulaanbaatar  
Email: danzang@who.int  

Dr Ariuntuya Ochirpurev  
Technical Officer  
WHO Health Emergencies Programme  
World Health Organization  
Country Office for Mongolia  
Government Building No. 8  
Ulaanbaatar  
Email: ochirpureva@who.int

WHO Papua New Guinea  
Dr Gilbert Hiawalyer  
World Health Organization  
Country Office for Papua New Guinea  
AOPI CENTRE, Waigani Drive  
Port Moresby  
Email: gilberthiawalyer@gmail.com  

Ms Nola Ndrewei  
World Health Organization  
Country Office for Papua New Guinea  
AOPI CENTRE, Waigani Drive  
Port Moresby  
Email: ndrewein@who.int

WHO Philippines  
Ms Rowena Capistrano  
World Health Organization  
Country Office for the Philippines  
Ground Floor, Building 3, Department of Health  
San Lazaro Compound, Rizal Avenue, Sta. Cruz  
Manila  
Email: capistranor@who.int

WHO Viet Nam  
Dr Phuc Nguyen Thi  
Technical Officer (ESR)  
Disease Control and Health Emergencies Team  
World Health Organization  
Country Office for Viet Nam  
304 Kim Ma Street  
Hanoi  
Email: phucn@who.int  

Dr Satoko Otsu  
Team Leader  
Disease Control and Health Emergencies Team  
World Health Organization  
Country Office for Viet Nam  
304 Kim Ma Street  
Hanoi  
Email: otsus@who.int

Partner Agencies  
Dr Joshua A Mott  
Director, Influenza Programme  
CDC Sub-Regional office for Southeast Asia  
CDC -Thailand  
Nonthaburi, Thailand  
Email: zud9@cdc.gov

Dr Siddhartha Saha  
Director, Influenza Programme  
US CDC, India  
New Delhi, India  
Email: wmk5@cdc.gov

Dr Wanitchaya Kittikraisak  
Epidemiologist Influenza programme  
CDC, Thailand  
Bangkok, Thailand

Dr Prabda Praphasiri  
CDC, Thailand  
Email: hpu3@cdc.gov
Dr Amalya
Database Manager
US CDC, Indonesia
Jakarta, Indonesia
Email: xel5@cdc.gov

Dr Catharina Yekti Praptining
US CDC, Indonesia
Jakarta, Indonesia
Email: xel3@cdc.gov

Dr William Davis
US CDC, Bangladesh
Dhaka, Bangladesh
Email: lyo0@cdc.gov

Dr Stefan Fernandez
Chief, Department of Virology
Armed Forces Research Institute of Medical Sciences (AFRIMS)
Bangkok, Thailand
Email: stefan.fernandez.mil@afirms.org

Dr Anthony Jones
MI Armed Forces Research Institute of Medical Sciences (AFRIMS)
Bangkok, Thailand

Dr Filip Claes
Regional Laboratory Coordinator
FAO
Bangkok

Dr Lesa Thompson
Regional Project Officer
OIE RRAP
Email: l.thompson@oie.int

Dr Kinzang Dukpa
Regional Project Coordinator (One Health)
OIE RRAP
email: k.dukpa@oie.int

Dr Caitlin Holley
Regional Project Coordinator
OIE RRAP
Email: c.holley@oie.int

Dr Pasang Tshering
Consultant
OIE RRAP

Dr Richard Webby
Director
St. Jude’s Children’s Research Hospital
Email: Richard.Webby@STJUDE.ORG
The Fourteenth Bi-Regional Meeting of national influenza centres and influenza surveillance in the WHO South-East Asia and Western Pacific regions took place virtually on 16–18 August 2021.

Participants included representatives from Member States, advisers, observers, staff of the World Health Organization’s headquarters, two regional offices and country offices, and experts from WHO collaborating centres and partner agencies.

A number of recommendations were identified. This report describes the proceedings of the meeting sessions, outlines the participant discussions on the three underlying themes and lists the recommendations for Member States, the WHO Secretariat and partner agencies.