Pandemic influenza preparedness and response efforts in South-East Asia Region during COVID-19 pandemic

WHO and Member States in WHO’s South-East Asia region share learnings and achievements in pandemic influenza preparedness (PIP) and rolling out of the global influenza strategy (2019–2030), despite disruptions caused by COVID-19 pandemic.

Influenza pandemic preparedness: global initiatives and response

- Influenza is an important cause of morbidity and mortality resulting in an estimated 3–5 million cases of severe influenza illness and 250 000–500 000 annual deaths globally.
- Global Influenza Surveillance and Response System (GISRS) provides the framework for collaboration with National Influenza centres, collaborating centres and partners, monitoring influenza activity and supporting countries in developing prevention and control strategies for pandemic influenza.
- WHO’s Global Influenza Strategy (2019–2030) encourages all countries to establish seasonal influenza prevention and control programmes, develop tools and build country capacities to protect vulnerable populations and contribute to universal health coverage (UHC).
- The PIP framework, adopted by World Health Assembly (WHA) in 2011, incorporates provisions for sharing of influenza viruses and access to vaccines and other pandemic related benefits.
WHO SEA Regional Office’s efforts to improve Influenza surveillance and response

- Influenza surveillance and timely reporting of information can help countries prepare for minimizing impact of disease, better planning, appropriate control and intervention measures, allocation of health resources, and making case management recommendations.
- Within the scope of global Influenza strategy (2019–2030), PIP framework and International Health Regulations (2005), the Regional Office helps Member States build, strengthen, and maintain core capacities to effectively respond to influenza pandemics and other respiratory pathogens of epidemic and pandemic potential.
- Influenza team at IHM/WHE SEARO supports countries to do timely reporting of epidemiological and virological data to WHO’s global data sharing platforms, namely “FluID” and “FluNet” besides sharing influenza viruses with WHO Collaborating Centres (WHO CC).
- Countries are provided updated influenza situational analyses, using standard epidemiological and virological parameters, support for risk assessments during outbreaks and training for Pandemic Influenza Severity Assessments (PISA). These efforts contribute to national, regional, and global health security.

Strengthening effective networking among public health laboratories in SEAR to better handle COVID-19 surges

- Since emergence of COVID-19, the informal laboratory network in WHO’s SEAR has been strengthened. It serves as an effective platform for exchanging knowledge, referring samples, mobilizing technical expertise and resources to support pandemic response.
• The network is a critical source of regional and global expertise deployed to boost laboratory diagnostic capacities when and where most needed. During surges in transmission of SARS-CoV-2 virus, it enabled enhancing of capacities for specimen referrals for PCR testing, genomic sequencing and bioinformatics analysis, within and outside the region.

Intensified efforts by Member Countries to improve timely Influenza virus sharing during COVID-19 pandemic

• Influenza virus sharing is vital to facilitate influenza risk assessments, develop influenza candidate vaccine viruses, update diagnostic reagents, test kits and determine resistance of influenza viruses to antiviral medicines.
• Despite severe disruption from the pandemic, countries in WHO’s SEA region resumed influenza virus sharing activities and successfully contributed to ensure geographical representation of viruses presented for WHO’s bi-annual seasonal influenza vaccine composition meetings.
• All countries in the Region that possessed influenza-positive specimens shared viruses at least once during the year with WHO CC to enable them inform WHO’s bi-annual vaccine composition meetings with virological information.
• WHO supported countries with need-based logistical support through the Regional Office and the Shipping Fund Project of WHO. The activity was maintained by sending out periodic reminders for timely virus sharing by countries.

Expanding national influenza surveillance and laboratory capacity for integrated management of response to influenza surges and COVID-19 pandemic

• Continuous threat of pandemic influenza makes quality laboratory diagnostics an essential part of laboratory strengthening for pandemic preparedness.
• Member countries in WHO SEA Region invested in laboratory capacity strengthening using the PIP Framework, in alignment with lessons learned from the Influenza A/H1N1 pandemic in 2009 and subsequent influenza epidemics.
• Further investments were made in the region’s sub-national expansion of influenza like illness (ILI) and Severe Acute Respiratory Infections (SARI) surveillance and laboratory capacity for integrated monitoring of SARS-CoV-2 and influenza surveillance during the pandemic.
- Countries expanded national influenza surveillance by setting up new labs, organizing staff trainings, conducting diagnostic testing and performing on-site reviews. These interventions are helping improve quality assurance while countries introduce and strengthen molecular testing capacity for influenza and other respiratory pathogens.

Reprioritizing PIP in synergy with COVID-19 pandemic response

- COVID-19 pandemic has severely impacted systems built for preparedness and response to influenza pandemics in Member Countries of the WHO SEA Region.
- Considering the risk such a disruption could have on the region’s PIP, WHE/SEARO conducted one-on-one discussions with national influenza programmes in all Member States in the early phase of the pandemic. Effort was made to jointly outline strategies to revitalize national influenza surveillance and response systems in the context of the ongoing pandemic.
- Regional Office organized a consultation to implement WHO guidance on maintaining influenza surveillance and monitoring SARS-CoV-2 through national surveillance systems in Member States.
- WHO with PIP partnership Contribution fund recipient countries reviewed implementation of PIP-PC funds-supported activities during the pandemic and identified key priority areas for strengthening PIP.
• PIP secretariat on guidance of an independent advisory group issued guidance for PIP partnership fund recipient countries to recalibrate existing PIP related strategies aligned with COVID-19 response activities.

• Countries now reflect on lessons learnt during the pandemic while identifying priority interventions such as risk communication and community mobilization for future investments with a view to effectively respond to pandemics.

Sustaining ILI/ SARI surveillance at all times, despite impact of COVID-19 pandemic

• COVID-19 pandemic has impacted influenza surveillance in Member States and shed light on the need to revisit surveillance platforms and streamline effective surveillance approaches.

• Seeing a drop in influenza testing during the pandemic, countries developed and used standard operating procedures (SoPs) that described influenza as well as SARS CoV-2 testing in alignment with national COVID-19 protocols.

• To reduce burden on laboratory staff at National Influenza Centres (NIC) who were overwhelmed with testing for SARS CoV-2, the CDC’s Influenza SARS-CoV-2 (Flu SC2) Multiplex Assay was introduced for testing samples that were collected by leveraging ILI/SARI systems with support of the Global Influenza Programme.

• During 2020, there was a global decline in testing of samples for influenza viruses. However, in 2021, significant improvement was seen in samples tested in the WHO SEA region.

• Continuous and concerted efforts by Member States based on recommendations of regional meetings, technical and logistics support of WHO, partners and WHO collaborating centres helped achieve these remarkable results.
SARI management training and capacity building put to practice during the pandemic

- The need to strengthen the clinical management component of pandemic/epidemic response has often been sub-optimal in pandemic preparedness and response plans.
- To address this need, the Regional Office provided training to a pool of trainers with a view to strengthen country and regional capacities in clinical management of SARI cases.
- Countries in SEAR now have a core group of physicians who underwent training on clinical management of SARI including those due to COVID-19 in non-intensive care units (ICU) settings using WHO’s SEA regional training modules.
- Targeted countries adapted lessons learnt from SARI trainings imparted through online and hybrid models to manage severe and critical COVID-19 cases in real-world situations.
Towards greater resilience

- Countries are intensifying their efforts so they can be more resilient to manage health emergencies due to influenza and other acute respiratory pathogens.

- Successful implementation of global influenza strategy (2019-30), PIP framework, strengthening health systems, streamlining operational procedures and ongoing technical collaboration with global centres of excellence is upgrading countries’ potential response to multiple respiratory pathogens of epidemic and pandemic potential based on the influenza model.