VACCINE-PREVENTABLE DISEASES AND IMMUNIZATION

The Regional Committee for the Western Pacific in 2014 endorsed the *Regional Framework for Implementation of the Global Vaccine Action Plan in the Western Pacific* (WPR/RC65.R5) to expand regional immunization initiatives. In response to the 2013–2016 Region-wide measles resurgence and to accelerate rubella elimination, the Regional Committee in 2017 endorsed the *Regional Strategy and Plan of Action for Measles and Rubella Elimination in the Western Pacific* (WPR/RC68.R1). Through implementation of these plans, many countries have achieved the regional immunization goals and further strengthened their immunization systems and programmes.

Despite progress and achievements, the number of people unreached by immunization efforts is still high – and even increasing in some countries – which resulted in the emergence, resurgence and large-scale import-related outbreaks of several vaccine-preventable diseases in the Region in 2018 and 2019. In addition, immunization service delivery has not expanded significantly beyond childhood immunization programmes, even though additional vaccines are available for older age groups. Recent public health emergencies in the Region – such as natural disasters, adverse events following immunization and a pandemic disease – reveal the urgent need to ensure that immunization systems and programmes are an integral part of strong health systems.

The Regional Committee for the Western Pacific is requested to consider for endorsement the draft *Regional Strategic Framework for Vaccine-preventable Diseases and Immunization in the Western Pacific (2021–2030).*
1. CURRENT SITUATION

The Regional Committee for the Western Pacific endorsed the Regional Framework for Implementation of the Global Vaccine Action Plan in the Western Pacific (WPR/RC65.R5) in 2014 to expand immunization initiatives in the Region and implement the Global Vaccine Action Plan 2011–2020, endorsed by the World Health Assembly in 2012. The Framework called on Member States to achieve eight regional goals: (1) sustaining polio-free status; (2) maternal and neonatal tetanus elimination; (3) measles elimination; (4) accelerated control of hepatitis B; (5) rubella elimination; (6) introduction of new vaccines; (7) meeting regional vaccination coverage targets; and (8) accelerated control of Japanese encephalitis. In response to the 2013–2016 Region-wide measles resurgence and to accelerate rubella elimination, the Regional Committee in 2017 endorsed the Regional Strategy and Plan of Action for Measles and Rubella Elimination in the Western Pacific (WPR/RC68.R1), calling on Member States to develop or update national strategies and plans to eliminate the diseases.

The Region has maintained polio-free status and continued to significantly reduce the prevalence of hepatitis B infection among children. Only one country in the Region has not achieved the elimination of maternal and neonatal tetanus. The Region experienced historically low incidences of both measles and rubella in 2017 and 2018. As of September 2019, nine countries and areas\(^1\) have been verified as having achieved measles elimination. Meanwhile, five countries and areas\(^2\) have been verified as having achieved rubella elimination.

Despite these successes, many people continue to be left behind by national immunization efforts, with the numbers of unvaccinated people even increasing in some countries at the same time regional plans were being implemented. These immunity gaps led to the recent emergence, resurgence and large-scale import-related outbreaks of several vaccine-preventable diseases (VPDs) in high-risk communities of the Region in 2018 and 2019. Rapid demographic changes tied to population growth and movement, difficult socioeconomic challenges, such as the growing number of urban poor, and epidemiologic shifts due to ageing populations with immunity gaps must be urgently addressed. The percentage of the population over 65 years of age in the Region has increased from under 7.5% in 2000 to over 12% in 2020 – and is expected to grow to about 17% in 2030. And while additional vaccines are now available for older people, as well as adolescents and adults, immunization service delivery has not expanded sufficiently beyond childhood immunization programmes, and immunization throughout

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\(^1\) Australia, Brunei Darussalam, Cambodia, Hong Kong SAR (China), Japan, Macao SAR (China), New Zealand, the Republic of Korea and Singapore

\(^2\) Australia, Brunei Darussalam, Macao SAR (China), New Zealand and the Republic of Korea
the life-course is not a part of the overall health system in many countries. Recent health security issues in the Western Pacific Region, such as natural disasters, adverse events following immunization and coronavirus disease 2019 (COVID-19) have revealed the urgent need to ensure that immunization systems and programmes are an integral part of the response to public health emergencies.

2. ISSUES

2.1 Unreached by immunization

While overall immunization coverage has increased in many countries in the Region, the benefits of immunization continue to be inequitably shared within countries. In fact, the number of people not being reached by regular immunization services is rising in some countries that employ the traditional disease-specific approach to immunization. The growing number of people who are not being reached by immunization exposes the inequity in the provision of health services, and it also causes immunity gaps within populations, which in turn trigger and expand VPD outbreaks.

Everyone should have access to equal opportunity for immunization. Meanwhile, cross-border population movements, migration and emerging human settlements present fresh challenges. Socioeconomic and cultural challenges, including increased poverty, unequal education opportunities, gender-related biases and vaccine hesitancy, have also made it more difficult to identify and reach the unreached with immunization services.

In fact, many people are still being left behind by regular immunization services because of a lack of sufficient epidemiologic intelligence on VPDs and an underappreciation of the importance of immunizations at the subnational level. This epidemiologic intelligence must be more actively collected and strategically used to identify and reach out to those being left behind. Another major challenge is a lack of tailor-made immunization strategies that take into account the specific context of these underserved communities. Such strategies must be developed and implemented to reach the unreached and close the immunity gaps that leave too many people unvaccinated.

2.2 Suboptimal response to re-emerging, targeted VPDs due to insufficient preparedness

Recent demographic challenges and epidemiologic shifts across the Region have had a serious impact on the prevention and control of VPDs, and have revealed gaps in current disease-specific elimination initiatives. Growing ageing populations, rapid urbanization and expanding globalized travel are bringing together unprotected individuals in large and dense communities, with immunity gaps that lead to the easy spread of difficult-to-control and easily transmissible diseases.
Since 2018, multiple communities in four countries have been affected by the emergence and circulation of vaccine-derived poliovirus. Since 2019, the Region has seen a resurgence or large-scale import-related outbreaks of measles in several countries, as part of a global measles resurgence. Diphtheria outbreaks repeatedly affect high-risk communities in some countries. Recently, rubella outbreaks have affected adult populations.

Holistic approaches to the prevention of, preparedness for and response to re-emerging targeted VPDs have not been sufficiently established in many countries in the Region. To be effective, such approaches require prompt detection, confirmation and characterization of pathogens by comprehensive VPD surveillance systems, with strong laboratory support and networks.

2.3 Lack of platforms ensuring immunization service throughout the life-course

Over the past three decades, Member States and WHO have been engaged in poliomyelitis eradication, measles elimination and the accelerated control of hepatitis B in the Region and, since 2014, in rubella elimination and the accelerated control of Japanese encephalitis.

While these disease-specific control and elimination initiatives have strengthened childhood immunization services and significantly reduced morbidity, mortality and disability due to targeted VPDs among children, many countries and areas have yet to benefit fully from other traditional and newly introduced vaccines for VPDs, such as cervical cancer, diphtheria, disease caused by *Haemophilus influenzae* type b, pneumococcal disease and typhoid.

While more vaccines are now available for adolescents, adults and older people, the expansion and integration of immunization service delivery throughout the life-course has not yet occurred in many countries in the Region. The integration of immunization systems and programmes into the overall health system, as well as integration among immunization activities targeting specific diseases, is still insufficient in the Region.

Strong, integrated platforms for immunization service delivery throughout the life-course should be established in all countries and areas of the Region to ensure synergy with other health interventions and programmes and to ensure everyone shares the benefits of vaccines and immunization.

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3 China, Malaysia, Papua New Guinea and the Philippines
4 American Samoa, Cambodia, Fiji, Hong Kong SAR (China), the Lao People’s Democratic Republic, New Zealand, Samoa and Tonga
5 Malaysia, the Philippines and Viet Nam
6 Japan
2.4 Insufficient resilience of immunization systems and programmes against public health emergencies

Inappropriate management of adverse events following immunization has led to decreased vaccine confidence, acceptance and demand, and even caused interruptions in immunization programmes, which in turn lead to larger immunity gaps among populations and VPD outbreaks. In a disaster-prone region such as the Western Pacific, earthquakes, floods, typhoons and volcanic eruptions have often interrupted the delivery of immunization services. Now, the ongoing COVID-19 pandemic is seriously affecting immunization programme performance and threatening gains in VPD control and elimination initiatives in many countries.

Immunization systems and programmes in many countries in the Region are still not resilient enough to withstand major public health emergencies. They must be further strengthened, together with evidence-based decision-making and action for the various disease control and elimination strategies.

3. ACTIONS PROPOSED

The Regional Committee for the Western Pacific is requested to consider for endorsement the draft *Regional Strategic Framework for Vaccine-Preventable Diseases and Immunization in the Western Pacific (2021–2030).*

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7 The Philippines and Samoa