



Schoolchildren in Vanuatu prepare to take their dose of preventive chemotherapy provided in school deworming campaigns as part of efforts to control and eliminate neglected tropical diseases in Pacific island countries and areas.

# Communicable Diseases

## INTRODUCTION

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Member States should be proud of their successes in controlling communicable diseases. They can build on these successes with the various tools available to combat these health challenges. Surveillance and control of priority communicable diseases are key components of UHC, and providing support for disease control remains a top priority for WHO.

## Introduction

### Sustaining and building on successes against communicable diseases

WHO and Member States have continued to make progress on the eight immunization goals included in the *Regional Framework for Implementation of the Global Vaccine Action Plan in the Western Pacific*. The Region has maintained its polio-free status, and rubella vaccinations are now included in all national immunization schedules. In addition, coverage with a third dose of diphtheria–tetanus–pertussis (DTP3) vaccine exceeds 95%, and 13 countries and areas have now reached the regional target of less than 1% chronic hepatitis B infection in 5-year-old children.

Member States have reported many immunization achievements over the past year. Cambodia was validated as having achieved maternal and neonatal tetanus elimination. Cambodia also conducted a nationwide Japanese encephalitis vaccination campaign, followed by introduction of the vaccine in its routine immunization programme. Mongolia introduced pneumococcal conjugate vaccine in two districts as part of an impact evaluation study. Meanwhile, Papua New Guinea, Vanuatu and Viet Nam introduced rubella vaccine into their national immunization programmes, and Singapore was verified as having reached the regional hepatitis B target.

However, outbreaks of vaccine-preventable diseases in a number of Member States indicate continuing gaps in coverage.



A WHO immunization officer (right) and a local health worker (left) vaccinate a child on Tanna island, Vanuatu, as part of a measles–rubella campaign to reach every child.



A clinician in China counsels a patient on the need to adhere to medication regimens, including life-saving antiretroviral drugs for HIV infection.

Nine out of 10 endemic countries achieved the Millennium Development Goal target for malaria. Building on this success — and guided by the *Global Technical Strategy for Malaria 2016–2030* and the *Strategy for Malaria Elimination in the Greater Mekong Subregion (2015–2030)* — malaria-endemic countries in the Region have been accelerating efforts to achieve elimination.

WHO has worked intensively with the countries in the Greater Mekong Subregion to accelerate control and to eliminate the threat of artemisinin-resistant *falciparum* malaria by supporting the development of national elimination plans and providing training on malaria elimination. WHO organized biregional training on strengthening vector control for elimination and supported strengthening of quality assurance of malaria interventions, including monitoring the efficacy of antimalarials and insecticide resistance.

Significant progress has been achieved in the elimination of trachoma and other neglected tropical diseases. WHO began piloting a community-based integrated approach to eliminate schistosomiasis in Mekong countries. Continued support was also provided to strengthen vector-control response in countries affected by arboviral outbreaks, such as dengue and Zika virus disease.

The Region has also made progress in controlling HIV, sexually transmitted infections (STIs) and hepatitis. National HIV prevalence has remained below 1% in all countries in the Region, and 520 000 people are now on antiretroviral therapy. In working towards elimination



Long-lasting insecticidal nets are widely used to protect people from malaria.

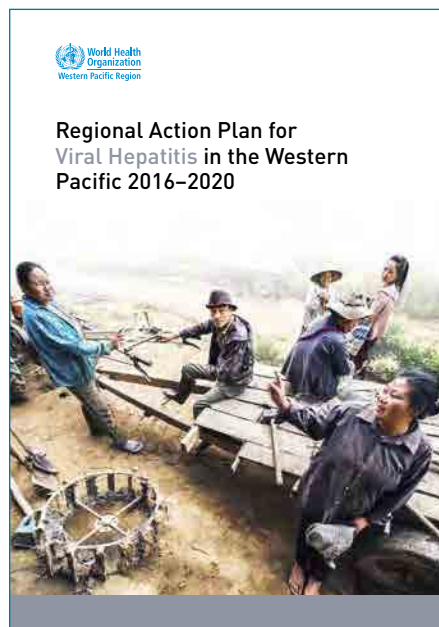
of HIV as a public health threat by 2030 and combating hepatitis and STIs, WHO supported Member States to apply new diagnostics and prevention and treatment guidelines. WHO provided support to improve the quality of HIV and syphilis diagnostics and improve access to HIV testing services in communities. Support was also provided for innovative interventions such as pre-exposure prophylaxis to prevent HIV infection among people with substantial risk. A regional mechanism was established to validate parent-to-child HIV and syphilis transmission. Information systems were enhanced to better monitor impact, and sustainable financing mechanisms were explored.

Viral hepatitis continues to be a major focus of work. Key initiatives included conducting country disease burden and economic analyses, developing national action plans in some high-burden countries and supporting efforts by Member States to include hepatitis medicines in the national programme.

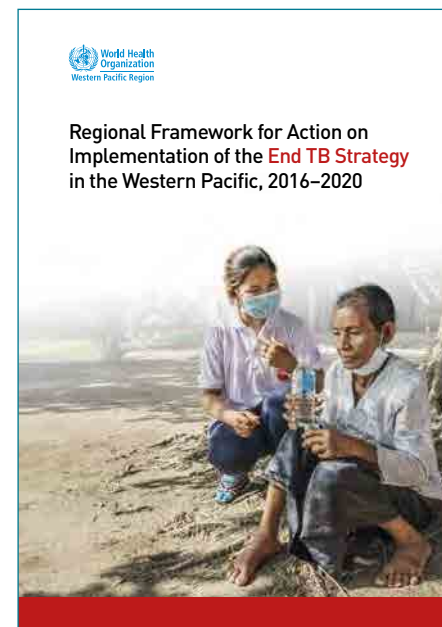
This past year ushered in a new era for tuberculosis (TB) control. Member States endorsed the *Regional Framework for Action on Implementation of the End TB Strategy in the Western Pacific, 2016–2020*, which promoted innovative approaches and tools including new diagnostics and drugs. The 10th National TB Programme Managers Meeting in March 2016 brought together country representatives to discuss priority issues, such as cross-border collaboration for TB control among migrants, scaling up the response to drug-resistant TB and enhancing patient support to contribute to universal health coverage (UHC).

Access to innovative tools to combat TB expanded across the Western Pacific Region in line with WHO policies. Xpert MTB/Rif, a WHO-endorsed rapid diagnostic tool, was made available in all high-burden countries, cutting the waiting time for results to just a few hours. Countries began introducing new drugs that can be life-saving for drug-resistant TB patients with few treatment options. WHO continues to work with Member States to ensure equal, unhindered access to quality TB prevention and care.

Member States should be proud of their successes in controlling communicable diseases. They can build on these successes with the various tools available to combat these health challenges. As donors reduce their support to Region, however, a key issue for Member States will be determining how to organize and domestically fund these efforts, to ensure they are efficient, effective and sustainable. Surveillance and control of priority communicable diseases are key components of UHC, and providing support for disease control remains a top priority for WHO. ■

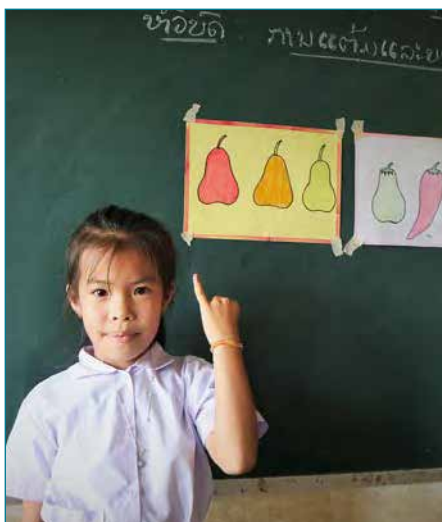


The action plan guides the development of country-specific national hepatitis responses based on the needs and priorities of people living with hepatitis or at risk for viral hepatitis, as well as the capacity of the national health system.



The regional framework operationalizes the global strategy, laying out an ambitious direction for TB control in the Region.

# 1. Implementation of the Polio Endgame in the Western Pacific Region



A young girl proudly participates in a supplementary immunization activity (SIA) rolled out across the Lao People's Democratic Republic in response to an outbreak of type 1 circulating vaccine-derived poliovirus. Monthly SIAs were conducted starting soon after detection of the virus in October 2015.

In the past year, the Western Pacific Region has made important strides in implementing the *Polio Eradication and Endgame Strategic Plan 2013–2018*, known as Polio Endgame. Member States have made major progress on three key objectives:

## 1. Detecting and interrupting poliovirus

The Western Pacific Region was first certified as free of polio in 2000. Since then, national certification committees and the

Regional Certification Commission have closely monitored the situation, and the Region has maintained its polio-free status.

Though no wild polioviruses have been detected in the Region since 2011, 11 confirmed cases of type 1 circulating vaccine-derived poliovirus (cVDPV1) were detected in the Lao People's Democratic Republic between September 2015 and January 2016. The outbreak response was rapid, beginning within 14 days of confirmation of the first case. Since then, eight rounds of polio vaccine supplementary immunization activities (SIAs) have been conducted from October 2015 to June 2016. In addition, preventive SIAs to increase population immunity were conducted in Cambodia, China and Viet Nam.

## 2. Strengthening immunization systems and withdrawal of oral polio vaccine

All countries and areas using any oral polio vaccine (OPV) in their national immunization schedule successfully switched from trivalent OPV (tOPV) to bivalent OPV (bOPV) during the globally synchronized switch from 17 April to 1 May 2016.

In addition, WHO recommended globally that all countries and areas using a polio vaccination schedule that included only OPV should add – before the switch – at least one dose of inactivated polio vaccine (IPV) in their national schedule.

In the Western Pacific Region, this meant such a change was needed in 17 countries and areas, and of these 15 successfully introduced IPV. The introduction of IPV in Mongolia and Viet Nam was delayed due to the global shortage of the vaccine. Meanwhile, Malaysia, Tokelau and Tuvalu have switched to a schedule that only uses IPV.

## 3. Virus containment and certification

All countries and areas successfully completed preparations for containment of wild poliovirus type 2 (WPV2) and vaccine-derived poliovirus type 2 (VDPV2) and have submitted reports on their destruction or containment. Australia, China, Hong Kong SAR (China) and Japan will each designate poliovirus-essential facilities to retain type 2 wild and/or vaccine-derived polioviruses.

All Member States submitted documentation concerning the date when WPV2 was last isolated. This information, along with similar documentation from other WHO regions, made it possible for the Global Certification Commission to declare the worldwide eradication of indigenous type 2 wild poliovirus. Through these efforts, the Western Pacific Region has made an essential contribution to the Polio Endgame. Although some challenges remain, we are close to eradicating the scourge of polio once and for all. ■

## 2. Progress on the path to regional elimination of lymphatic filariasis

Lymphatic filariasis is one of the 13 neglected tropical diseases endemic in the Western Pacific Region. The disease is caused by mosquito-borne filarial parasites. The infection can result in permanent disability, such as lymphoedema or elephantiasis of limbs and hydrocele (scrotal swelling). In addition, people may suffer from mental health and socioeconomic impacts due to the stigma associated with the disease, further aggravating their suffering.

In 1997, WHO launched its Global Programme to Eliminate Lymphatic Filariasis (GPELF). Member States, communities, donors and partners joined forces to eliminate the disease as a public health problem globally by 2020. The WHO strategy is twofold: (1) interrupting transmission through annual mass drug administrations (MDAs) for all eligible people in all endemic areas; and (2) alleviating the suffering caused by the disease through morbidity management and disability prevention activities.

Endemic countries in the Region have achieved significant progress tackling this disease through MDAs. In 2016, out of 22 lymphatic filariasis-endemic countries and areas, four (Cambodia, Cook Islands, Niue and Vanuatu) received official WHO validation for having eliminated lymphatic filariasis as a public health problem. Seven others are in the post-MDA surveillance phase nationwide, four of which



A patient with lymphoedema in Ninh Thuan province, Viet Nam, learns the importance of proper leg washing to prevent acute inflammatory attacks – an example of preventive health care that must be sustained to reduce morbidity after achieving elimination of lymphatic filariasis through mass drug administration programmes.

(the Marshall Islands, Palau, Tonga and Viet Nam) are preparing their dossiers for official WHO validation. Eleven countries are implementing MDAs. Among those countries, eight have completed possibly their last round of MDAs in 2015. These eight will assess their eligibility to begin the post-MDA surveillance phase.

Elimination of lymphatic filariasis in the Region will make a real difference. The achievement will remove a neglected tropical disease that causes significant morbidity and stigma, and improve the

socioeconomic well-being of people in affected communities.

However, achieving elimination of the disease as a public health problem is not the end of the story. Strong surveillance must be integrated into general health services to ensure early case detection and rapid response to prevent re-establishment of transmission. Health-care service provision for people affected by the ongoing debilitating effects of residual morbidity also must be strengthened. ■

### 3. Rapid state-of-the-art diagnosis and treatment of drug-resistant tuberculosis in the Pacific

In October 2015, a 41-year-old man named Christopher visited a health clinic in Tarawa, Kiribati, complaining of a persistent cough and weight loss. He did not know it, but Christopher had multidrug-resistant tuberculosis (MDR-TB) – a type of TB resistant to the two most powerful drugs, rifampicin and isoniazid.

Great distances and limited resources often make it difficult to treat TB in remote islands in the Pacific. MDR-TB poses an even greater challenge: diagnosis and care are complex and costly. Drug resistance cannot be detected through traditional methods using microscopes, and doctors lack experience providing the complex treatment required. In addition, the high cost and short shelf life of drugs can make it impractical to keep supplies on hand.

Christopher was saved, thanks to several key initiatives in the Pacific designed to support patients like him. His diagnosis of drug-resistant TB was made in a matter of hours by a state-of-the-art rapid test.

To support his treating physician, WHO organized a teleconference with the regional treatment group – connected remotely via computer – of experienced TB clinicians, laboratory experts and public health consultants from Adelaide in Australia, Honolulu in the United States of America and WHO. The group provided the local health team with detailed clinical advice on treatment, management of

side effects and prevention of the spread of the disease.

WHO sent drugs from the Pacific TB drug stockpile at the Philippine Department of Health, so Christopher was able to start treatment just 17 days later. Additional drug susceptibility testing was carried out by a laboratory in Adelaide under the Pacific TB Laboratory Initiative (PATLAB). The results of these tests were used to adjust Christopher's drug regimen to make it more effective.

Since 2011, the regional MDR-TB group, PATLAB and the Pacific TB drug stockpile have been meeting the needs of individual patients and TB programmes in Pacific island countries and areas. WHO manages these initiatives with financial support from donors, including the Global Fund to Fight AIDS, Tuberculosis and Malaria. MDR-TB diagnosis and care in the Pacific presents major challenges for patients and health workers alike. These practical initiatives help overcome the challenges in providing the quality TB care each patient deserves. ■



Christopher, a patient with multidrug-resistant TB, receives health care in Kiribati as WHO staff consult.





The future looks brighter for 46-year-old Enkhbaatar and others like him living with hepatitis in Mongolia where access to treatment is increasing and prices of medicines are falling.

## 4. The fight against viral hepatitis

Viral hepatitis is the seventh-leading cause of mortality globally, responsible for 1.45 million deaths in 2013. The Western Pacific Region contains about a quarter of the world's population but bears 40% of these deaths, with an estimated 1500 people dying from hepatitis every day in our Region.

While the figures continue to be alarming, the Region has significantly reduced childhood transmission of hepatitis B through vaccinations over the past two decades. These efforts culminated in the Region as a whole achieving the goal of less than 1% hepatitis B prevalence among 5-year-olds in 2015 – two years ahead of

the target date. In all, 13 countries have individually reached the 2017 target. An estimated 7 million deaths will be averted as a result of Member States' commitment to combat viral hepatitis, according to WHO figures.

Guided by the *Regional Action Plan for Viral Hepatitis in the Western Pacific 2016–2020*, countries are now moving beyond immunization to prevent new infections and address the needs and priorities of people living with hepatitis.

To strengthen the evidence base for national efforts, the Regional Office for the Western Pacific has supported five countries in estimating their viral hepatitis

disease burden. Economic analyses were conducted for hepatitis B and C in China and hepatitis C in Mongolia. Country assessments of viral hepatitis situations and responses in Kiribati, Mongolia and Viet Nam have informed national policy development, including a national goal of hepatitis C elimination by 2030 in Mongolia. Four Member States, Australia, Japan, Mongolia and Viet Nam, have national action plans in place, and several more are preparing plans.

New medicines can treat chronic viral hepatitis, although high prices can restrict access. A number of countries now subsidize hepatitis B medicines. Recently Australia and Japan began funding new direct-acting hepatitis C medicines for patients, regardless of the stage of liver disease. WHO will continue to work with Member States to improve access to life-saving medicines and strengthen broader national responses to viral hepatitis, guided by national plans and measurable targets.

This is an exciting time in the fight against viral hepatitis. Working together, WHO and Member States can build on immunization successes and brighten the outlook of the many people living with these diseases across our Region. ■

## 5. Elimination of mother-to-child transmission of HIV and syphilis

Mother-to-child transmission of HIV and syphilis can be prevented through antenatal screening and appropriate treatment. The importance of these strategies was reaffirmed with the World Health Assembly endorsement in 2016 of new global health sector strategies for HIV and syphilis, which included the goals of zero new HIV infections among infants by 2020 and the elimination of congenital syphilis by 2030.

The Western Pacific Region has made significant progress towards the elimination of mother-to-child transmission of HIV. Between 2009 and 2014, the percentage of pregnant women who were tested for HIV increased to 67% from 21%. During the same period, the proportion of pregnant women living with HIV who received antiretroviral medicines increased to 58% from 38%. By contrast, syphilis screening among pregnant women remains low in many countries.

In 2014, approximately 12 000 pregnant women were living with HIV, and 2000 cases of new paediatric HIV infections occurred in the Region, mostly through mother-to-child transmission. In 2012, there were approximately 45 000 cases of maternal syphilis infections in the Region, resulting in 13 000 adverse outcomes, including early fetal deaths.

With relatively low epidemics of both diseases, steady economic development making health care more accessible and the availability of effective interventions,



The low burdens of HIV and syphilis, combined with steady economic development in the Region making health care more accessible, are favourable conditions for eliminating mother-to-child transmission of HIV and syphilis.

conditions are favourable for eliminating mother-to-child transmission of HIV and syphilis in the Region.

At the 10th Asia Pacific Prevention of Parent-to-Child Transmission Task Force Meeting in September 2015, Member States reviewed progress and renewed their commitment to achieve the elimination goals.

China, Fiji, Malaysia and Mongolia are close to achieving elimination of mother-to-child transmission of HIV and syphilis. In December 2015, WHO regional offices for South-East Asia and the Western Pacific jointly established regional validation mechanisms, including a regional validation secretariat.

Some countries are also integrating hepatitis B into their elimination efforts. China's integrated prevention of mother-to-child transmission programme provides a free antenatal care package of HIV, syphilis and hepatitis B screening and preventive interventions, including treatment as routine maternal and child health services.

A similar programme has been piloted in Viet Nam. WHO plans to provide a regional framework for triple elimination of mother-to-child transmission of HIV, syphilis and hepatitis B to promote better maternal and child health. ■