



# Communicable Diseases

## Introduction

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Parents and their newborn baby relax at the Davao Regional Medical Center in the Philippines. By increasing vaccination coverage from birth, WHO is promoting an integrated and coordinated approach to ensure that every child in the Region has the best chance to start a healthy life, free from preventable communicable diseases.

## Introduction

Member States have continued to make significant progress towards ambitious communicable disease control and elimination goals. In supporting Member State efforts, WHO's strategic focus has been to consider these goals as key universal health coverage (UHC) challenges: they will not be achieved and sustained unless quality disease prevention, diagnosis and treatment services reach all who need them.

An important example of this has been the increased service coverage achieved through implementation of the *Regional Framework for Action on Implementation of the End TB Strategy in the Western Pacific, 2016–2020*, particularly the expansion of rapid diagnostic tools and new drugs for treating drug-resistant tuberculosis (TB).

In the first year of implementation, the number of cases tested for rifampicin

resistance increased by 46%, resulting in an increase in drug-susceptibility testing coverage of 42%. The number of people living with HIV receiving isoniazid therapy to prevent TB co-infection increased by 41%, and people with TB/HIV co-infection receiving antiretroviral therapy (ART) increased by 36%.

Member States in the Region have also been leading the way in national TB patient

cost surveys to identify the extent to which families are incurring catastrophic costs due to TB. Seven surveys have been undertaken or planned. The information produced will be important for the strengthening of national efforts to end TB.

Similarly, WHO work on HIV, hepatitis and sexually transmitted infections has focused on supporting countries to provide key interventions to all who need them, with an emphasis on whole-of-system and integrated delivery approaches. The Member State endorsement of the *Regional Framework for the Triple Elimination of Mother-to-Child Transmission of HIV, Hepatitis B and Syphilis in Asia and the Pacific 2018–2030* was a key milestone. The framework takes an integrated and coordinated approach to achieving triple elimination, emphasizing the principles of UHC and mother-, newborn- and child-centred care.

WHO continued its work with Member States to help improve coverage of key HIV services, with Cambodia achieving the “90–90–90” coverage target three years ahead of the 2020 deadline. This means as of 2017 in Cambodia, 90% of all people living with HIV know their HIV status; 90% of all people with diagnosed HIV infection receive sustained antiretroviral therapy; and 90% of all people receiving antiretroviral therapy have viral suppression. Overall, 73% of people living with HIV in the Region have been diagnosed, and 55% have accessed treatment. Progress has been made, but much more remains to be done.

To help improve access to important hepatitis interventions, support was provided to Cambodia, China, Kiribati, Mongolia and the Philippines to identify how best to deliver viral hepatitis testing and

treatment services and monitor patients using existing health services, laboratory and information systems. Eleven countries have completed disease burden estimates for viral hepatitis B and C. National hepatitis action plans are available in eight countries.

Contributing to global and regional efforts to combat antimicrobial resistance, WHO provided support to strengthen gonococcal antimicrobial resistance surveillance in Cambodia and the Philippines.

Most malaria-endemic countries have continued to make good progress towards achieving national elimination, although Cambodia, Papua New Guinea and Solomon Islands experienced an increase in the total number of cases, due to outbreaks.

Supporting countries on the journey to elimination remains the key focus for WHO, along with the battle against partial resistance to artemisinin and its partner drugs in the Greater Mekong Subregion: no new foci of resistance were detected, indicating that further expansion of affected areas was prevented during the year.

Strengthened surveillance will be key to achieving and sustaining malaria elimination. Efforts to achieve such strengthening, along with updating national treatment guidelines, have continued in many endemic countries, guided by the *Regional Action Framework for Malaria Control and Elimination in the Western Pacific (2016–2020)*. Important progress has also been made in combating



Achieving the goal of malaria elimination in the Philippines relies on strengthening laboratory capacity for diagnosis and surveillance of the deadly disease.

neglected tropical diseases (NTDs). Tonga was validated as having achieved elimination of lymphatic filariasis as a public health problem, while Cambodia and the Lao People's Democratic Republic were validated as having achieved elimination of blinding trachoma as a public health problem. High population coverage with mass preventive chemotherapy helped Member States make further progress on the control and

elimination of selected NTDs. Strengthening integrated intersectoral efforts continues to be needed in the water, sanitation and hygiene as well as food safety and animal health sectors, to eliminate Asian schistosomiasis and control other zoonotic and foodborne NTDs.

Continued efforts to assure access to integrated, effective and high-quality immunization services have produced measurable

achievements at the regional and national levels. For example, the Region as a whole has achieved 97.3% coverage of three doses of diphtheria–tetanus–pertussis vaccine, while 22 countries and areas have reached coverage of over 90%, a goal of the Decade of Vaccines initiative.

Cambodia successfully sustained measles elimination, despite multiple importations of measles virus from endemic countries. New Zealand and the Republic of Korea were the first countries in the Region to be verified as having achieved rubella elimination. The Lao People's Democratic Republic conducted a periodic intensification of routine immunization activities with inactivated polio vaccine, which helped close immunity gaps of other vaccine-preventable diseases as well.

Meanwhile, the Philippines achieved maternal and neonatal tetanus elimination after three quality rounds of tetanus vaccination in the Autonomous Region in Muslim Mindanao, an isolated region with armed conflicts and other security concerns. Efforts to further increase the health impact of immunization through the introduction of new vaccines also continued. For instance, Mongolia introduced pneumococcal conjugate vaccine to cover Ulaanbaatar in early 2018, and it plans to cover the whole country in 2019.

Continued progress in these important areas is cause for celebration. However, if together we are to ensure that no one is left behind – that quality services reach all who need them, and that these services are sustained – there is still much to be done. ■



Primary school students line up to take anthelmintic medicine in a deworming campaign in the Lao People's Democratic Republic.

# 1. Better technologies and drugs for TB



At the Port Moresby General Hospital (pictured here) and throughout Papua New Guinea, the use of newer technologies and drugs to combat TB is rapidly increasing.

In the Western Pacific Region, 1.4 million TB cases were diagnosed and reported out of an estimated 1.8 million new cases in 2016, leaving a gap of about 400 000 “missing” cases. Finding missing cases by expanding TB services within the framework of

universal health coverage will be crucial to achieve ambitious goals for TB.

Molecular diagnostic tools, namely Xpert MTB/RIF and line probe assay, have an important role to play, providing rapid and accurate diagnosis for TB and drug-resistant

TB. The uptake of these new diagnostics is improving in the Western Pacific Region. By the end of 2016, there were 1630 laboratories providing Xpert diagnostic services, double the number in 2014. As a result, the number of new TB cases tested with Xpert MTB/RIF increased to 182 000 in 2016 from 93 000 in 2014.

Beyond ensuring rapid and universal access to quality diagnosis, all diagnosed TB patients must be started on and successfully complete treatment. Currently, in the Region, only half of the estimated drug-resistant TB cases are successfully treated. The wider use of shorter treatment regimens and new TB drugs may help to achieve higher treatment success rates for those with drug-resistant TB. Most high-burden countries in the Region have adopted the shorter regimen for multidrug-resistant TB and included new drugs in their treatment regimens, namely bedaquiline and delamanid. This should result in better treatment outcomes, benefiting patients and their families and reducing the risk of spreading the disease to others.

The *End TB Strategy* has a vision of a world free of TB, with ambitious targets of a 95% reduction in TB deaths and incidence rate by 2035, compared to 2015 levels. To achieve this, countries must ensure that high-quality TB services reach all who need them, so that no one is left behind. WHO will continue to work closely with countries to assist them on this journey. ■

## 2. Better monitoring of TB financial burden on families



A significant proportion of TB patients incur catastrophic costs when seeking treatment in some countries in the Region.

Effective TB care and prevention requires universal access to high-quality and affordable TB services by all people based on their needs. However, costs incurred by patients and their families continue to be a significant barrier to TB treatment. For many, these costs can be “catastrophic”, meaning

they consume over one fifth of the annual household income.

This issue is highlighted in the *End TB Strategy* in the target: *no families face catastrophic costs due to TB*. To help countries understand the extent to which such costs may be an issue in their efforts to control TB,

WHO has been recommending and supporting countries to conduct national TB patient cost surveys to understand the magnitude and drivers of the financial burden borne by families.

In the Western Pacific Region, TB patient cost surveys have been conducted or planned in seven countries since 2016: China, Fiji, Mongolia, the Philippines, Papua New Guinea, Solomon Islands and Viet Nam. Preliminary findings showed that 30–60% of TB-affected families face catastrophic costs due to TB.

In many settings, indirect costs, such as income loss, constituted the largest portion of total costs. In others, direct costs (medical and non-medical)\* when seeking treatment made up the significant proportion. In Viet Nam, for example, 63% of TB-affected families experienced catastrophic costs, with income loss accounting for 58% of the total costs.

The findings of these surveys help identify areas for improvement in health financing arrangements and service delivery models, as well as social protection mechanisms to address the financial burden faced by TB-affected families. ■

*\* Examples of medical costs include costs for diagnostic and treatment services incurred at health facilities, including hospitalization costs. Examples of non-medical costs are transportation, accommodation, food, etc.*

### 3. Strengthening eye care services through trachoma elimination efforts

The neglected tropical disease (NTD) trachoma remains the leading infectious cause of blindness worldwide. Caused by a bacterium called *Chlamydia trachomatis*, the infection is transmitted through contact with discharge from the eyes and noses of infected people, particularly young children. Disease transmission is typically concentrated among children and family living in crowded households with poor hygiene, inadequate sanitation and a lack of clean water.

With repeated infections, the inside of the eyelid becomes severely scarred (trichiasis), causing it to turn inward and the eyelashes to rub against the eyeball. This results in scarring of the cornea, visual impairment or blindness. Trachoma remains endemic in seven countries in the Western Pacific Region: Australia, Fiji, Kiribati, Papua New Guinea, Solomon Islands, Vanuatu and Viet Nam.

WHO recommends the SAFE strategy: Surgery, Antibiotics, Facial cleanliness, and Environmental improvement, particularly improved access to water and sanitation. Guided by this strategy, important progress has been made. In 2017, Cambodia and the Lao People's Democratic Republic became the first countries in the Region to be validated by WHO as having achieved elimination of trachoma as a public health problem. Validation also included an assessment of health system capacity to detect and treat potential patients into the future.



Nurses assist the only ophthalmologist in the country in examining children for signs of blinding trachoma in Kiritimati, Kiribati.

Member States and partners have been working together to strengthen national eye health capacity as a key component of the SAFE strategy. Efforts have included training for ophthalmologic doctors and nurses on eye examination and surgical interventions, and training for the broader health workforce on sustained service provision includ-

ing access to quality-assured antibiotics and surgical interventions. All endemic countries in the Region continue to strengthen their eye care systems to help achieve elimination of blinding trachoma. Importantly, this strengthening will also produce broader benefits, improving access to ophthalmologic services overall. ■



## 4. HIV and viral hepatitis: leaving no one behind

HIV and viral hepatitis present major public health challenges in the Western Pacific. Despite the availability of proven interventions and life-saving medications, there are 97 000 new HIV infections every year. Further, only 55% of people living with HIV (PLHIV), and a tiny fraction (less than 5%) of people living with hepatitis B and C, are receiving treatment. WHO is working closely with Member States to pursue innovative ways to increase access to essential prevention, care and treatment.

In the Philippines, WHO partnered with the Department of Health and a community-based organization to demonstrate how peer-driven delivery of pre-exposure prophylaxis (PrEP) can help curb the rapid rise in new infections among men who have sex with men. PrEP is an intervention whereby individuals who are HIV-negative but have substantial risks take daily antiretroviral drugs to prevent infection. The results will inform the potential national expansion of PrEP.

WHO is supporting Viet Nam to reach coverage targets for PLHIV through domestic financing. In November 2016, the Prime Minister signed into policy national health insurance coverage of drugs, consultations and laboratory fees. The policy substantially increased health insurance coverage for PLHIV to 82% in 2017 from 50% in 2016.

Over the past year, the Region made headway towards universal access to hepatitis B and C treatment. In high-income countries and areas — including Australia, Hong Kong SAR (China), Japan,



A counsellor from Love Yourself, a nongovernmental organization in the Philippines, talks with a peer. The group provides HIV counselling and testing to help prevent infection in key populations.

New Zealand, the Republic of Korea and Singapore — public financing made universal coverage of hepatitis treatment possible. Lower-middle-income countries made treatment accessible through health insurance, including Mongolia for hepatitis C and China for hepatitis B. Or they used lower-priced generic medicines, such as Malaysia did for

hepatitis C. Kiribati became the first Pacific island country to establish national treatment services for hepatitis B.

These have been important steps, but much work remains to be done. WHO will continue to work with Member States to make sure no one is left behind in ensuring access to life-saving interventions. ■

## 5. Accelerate hepatitis B control

The Western Pacific Region was the first WHO Region to decide to reduce chronic hepatitis B (hepB) infection by incorporating the vaccine into countries' immunization programmes. By ensuring infants receive three doses of vaccine, with the first dose administered within 24 hours of birth, countries have helped drive the regional hepB prevalence among 5-year-old children to less than 1% from over 8% in 1990.

Antenatal education and coordination of outreach efforts between village health volunteers and health facility workers have helped further ensure that newborns receive a timely birth dose. In 2016, 83% of infants in the Region received their birth dose within 24 hours, well above the global average of 39%.

Countries with suboptimal hepB coverage have acted to increase access for unvaccinated children. Solomon Islands is the sixth country in the Region to show that delivering hepB vaccine outside the cold chain is safe and effective, increasing their timely birth dose coverage among facility births to 68% from 30% and among home births to 24% from 4% from 2015 to 2016. Solomon Islands is working to expand this successful pilot study to three provinces for all health facilities that lack cold chain and for home births.

Countries with high hepB vaccine coverage are also increasing efforts for the elimination of mother-to-child transmission (EMTCT) of the disease. China, for example, has high and sustained hepB vaccine coverage and

high antenatal screening. Most exposed newborn babies receive hepatitis B immunoglobulin (HBIG) along with the timely birth dose. Now China is developing modelling studies to determine whether additional interventions, such as antiviral treatment of mothers with high viral loads, will be needed

to achieve EMTCT. Cambodia and Mongolia are also using modelling data to make informed decisions on the cost and impact of adding additional hepB interventions, such as HBIG and antiviral treatment, to strengthen their efforts to achieve EMTCT. ■



A child is vaccinated against hepatitis B in Cambodia. Every child should receive a timely birth dose plus at least two additional doses to be protected against the virus. Child vaccination is the most effective tool to prevent chronic infection for entire populations.