



REGIONAL OFFICE FOR THE WESTERN PACIFIC  
BUREAU RÉGIONAL DU PACIFIQUE OCCIDENTAL

REGIONAL COMMITTEE

WPR/RC68/4

Sixty-eighth session  
Brisbane, Australia  
9–13 October 2017

21 August 2017

ORIGINAL: ENGLISH

Provisional agenda item 9

## MEASLES AND RUBELLA ELIMINATION

In 2003, the Regional Committee for the Western Pacific decided to eliminate measles in the Region and, in 2005, set a 2012 target to achieve measles elimination in the Region. On the global level, the Sixty-fifth World Health Assembly endorsed the *Global Vaccine Action Plan* in 2012 to tackle a broad range of vaccine-preventable diseases. To provide further Region-specific guidance to Member States, the Regional Committee in 2014 endorsed the *Regional Framework for Implementation of the Global Vaccine Action Plan in the Western Pacific*, which included rubella elimination among four new regional immunization goals.

While the Region achieved historically low measles incidence in 2012, the regional elimination target was not met. In 2013–2016, the Western Pacific faced a Region-wide measles resurgence, which revealed several emerging challenges that had not been anticipated in previous approaches. More recently, a higher proportion of rubella cases has been reported among adolescents and young adults, leading to increased risk of congenital rubella syndrome. In response, the WHO Regional Office for the Western Pacific, in consultation with Member States and experts, developed the draft *Measles and Rubella Elimination in the Western Pacific: Regional Strategy and Plan of Action*. This plan updates the current regional action plan and offers additional guidance for rubella elimination.

The Regional Committee for the Western Pacific is requested to consider for endorsement the *draft Measles and Rubella Elimination in the Western Pacific: Regional Strategy and Plan of Action*.

## **1. CURRENT SITUATION**

Measles is one of the most contagious and devastating infectious diseases. Rubella causes multiple congenital anomalies, such as ophthalmic, auditory, craniofacial and cardiac defects, called congenital rubella syndrome (CRS). CRS can affect up to 90% of the fetuses of mothers infected with rubella in early pregnancy and may result in stillbirth or fetal loss. Since both immunization against and surveillance for measles and rubella can be integrated through use of measles-rubella-containing vaccine and undertaking fever and rash surveillance with laboratory confirmation, an integrated effort to concurrently eliminate measles and rubella is practical, and will further strengthen overall immunization systems.

In 2003, the Regional Committee endorsed the *Western Pacific Regional Plan of Action for Measles Elimination* ([WPR/RC54.R3](#)), later setting 2012 as the target date for measles elimination ([WPR/RC56.R8](#)). In 2012, the Regional Committee urged Member States to interrupt all residual endemic measles virus transmission as rapidly as possible and further accelerate the control of rubella and the prevention of CRS through the integration of measles and rubella immunization and surveillance activities ([WPR/RC63.R5](#)). In the same year, the Sixty-fifth World Health Assembly endorsed the *Global Vaccine Action Plan* ([WHA65.17](#)), which calls for measles and rubella elimination in at least five WHO regions by 2020. To provide Region-specific guidance for Member States, the Regional Committee endorsed the *Regional Framework for Implementation of the Global Vaccine Action Plan in the Western Pacific* ([WPR/RC65.R5](#)), which included rubella elimination as one of four new regional immunization goals with detailed plans of action anticipated for new goals.

The Western Pacific Region achieved historically low measles incidence in 2012. Six countries and two areas in the Region were verified to have achieved measles elimination in 2014–2016. However, in 2013–2016, there was a Region-wide measles resurgence. Endemic countries experienced increased ongoing transmission. And measles importation from endemic countries caused multiple outbreaks, in some cases large-scale outbreaks, in many countries where interruption of measles transmission had been achieved or was in the process of being achieved. As of 2016, all countries and areas in the Western Pacific Region had introduced rubella-containing vaccine into their national immunization programmes. However, rubella outbreaks continue to occur in some countries and areas in the Region. This has led to an increased number of reported CRS cases. This measles resurgence and continuing problems with rubella indicate further Region-specific guidance is needed.

In 2015, the Technical Advisory Group (TAG) on Immunization and Vaccine-Preventable Diseases in the Western Pacific Region requested that WHO provide updated guidance on measles

elimination, including (i) strategies to prevent and interrupt measles virus transmission among young infants, adolescents and adults; (ii) strategies for rubella elimination; and (iii) outbreak response immunization activities to support Member States in updating or developing national measles-rubella elimination strategies and plans of action in an effort to address emerging challenges ([24th TAG Meeting Report](#)).

## 2. ISSUES

### 2.1 Residual immunity gaps and the accumulation of susceptible population

Despite the fact that many countries improved routine vaccination coverage at the national level and conducted mass vaccination campaigns, residual immunity gaps among different age groups and the accumulation of susceptible children have contributed to a resurgence or large-scale outbreak of measles. Several countries have experienced increased measles incidence among adolescents and young adults not targeted by current immunization strategies, such as routine childhood immunization and traditional supplementary immunization activities. Measles virus transmission also has increased among infants too young to be vaccinated and immunity gaps in young adults, now becoming parents, is likely contributing to this. Further, in some countries, these gaps have become larger and triggered outbreaks in specific communities or groups. Innovative strategies for vaccinating adolescents and young adults, intensifying routine immunization programmes, and providing vaccination opportunities for high-risk communities and groups should be urgently developed and implemented to close residual immunity gaps and prevent accumulation of susceptible populations.

### 2.2 Possible increase in CRS incidence

In recent years, the proportion of those of reproductive age infected with rubella has been significantly increasing in several countries in the Region. Further, surveillance of CRS is currently very limited. In 2010, 94% of rubella cases in the Region were reported from countries and areas without CRS surveillance, suggesting that the current burden of CRS in the Western Pacific is largely unmeasured. A study estimated that approximately 9000 CRS cases occurred in the Western Pacific Region in 2010. To substantially reduce this burden, immunization strategies that use innovative methods with coordinated approaches involving multiple government sectors should be developed and carried out immediately.

### **2.3 Inadequate measles outbreak preparedness and response capacity**

Recent measles outbreaks revealed that several countries had not established sufficient outbreak response capacity at national and provincial levels or had not integrated measles outbreak response into systems to respond to health emergencies more broadly. This has resulted in delayed outbreak detection, inadequate investigation and outbreak response immunizations that were delayed or inadequate in scope to interrupt measles virus transmission. Some national measles and rubella laboratories also could not test or report the results of all specimens in a timely manner during outbreaks. Genotype information from some countries and areas is not available, and the submission of monthly virologic data from some countries to WHO tends to be delayed, resulting in delays in sharing regional virologic information with Member States and other WHO regions. In addition, in several countries measles outbreaks were amplified in health facilities and by health staff (nosocomial transmission) and high case fatality rates occurred among young infants. Updated regional and national strategies and plans of action should enable all countries and areas in the Region to establish adequate capacity to detect and report cases in a timely fashion and to respond immediately and effectively to prevent large-scale outbreaks and minimize morbidity and mortality.

## **3. ACTIONS PROPOSED**

The Regional Committee for the Western Pacific is requested to consider for endorsement the draft *Measles and Rubella Elimination in the Western Pacific: Regional Strategy and Plan of Action*.