Measles elimination by 2020: a feasible goal for the South-East Asia Region?

On 27 March 2014, the World Health Organization (WHO) South-East Asia Region, where one quarter of the world’s population lives, was officially certified polio free. This achievement has enabled the Region to embark on a similar mission, this time to eliminate measles by 2020, following the adoption of a resolution by the Regional Committee at its 66th session in September 2013. With this resolution, all WHO regions have set dates for measles elimination. The Region of the Americas has already achieved elimination, with interruption of endemic measles transmission in 2002.

With ongoing efforts to strengthen routine immunization, the recent success in polio-free certification, and the progress in reduction of measles mortality, the Region is well positioned to achieve this goal. Given that the strategies to eliminate measles and control rubella/congenital rubella syndrome (CRS) are similar, it is anticipated that when measles is eliminated in the Region, there is a very high likelihood that rubella/CRS will also be eliminated, with successful integration of rubella-control/elimination strategies into measles elimination, and introduction of a combination vaccine, i.e. measles and rubella (MR) or measles, mumps and rubella (MMR). Measles elimination has been defined as the absence of endemic measles transmission in a defined geographical area (e.g. region or country) for a period equal to or exceeding 12 months, in the presence of a well-performing surveillance system. The key strategies to achieve measles elimination entail achieving and maintaining 95% population immunity against measles, with two doses of measles-containing vaccine, through a routine and/or campaign approach; conducting sensitive and timely laboratory-supported case-based measles surveillance; increasing public confidence and demand for immunization against measles; and strengthening support and linkages to other interventions.

The optimism of the Region in relation to achieving the measles-elimination goal by 2020 is supported by existing evidence. For example, the Region-specific incidence rate for measles decreased by 76%, from 70 per million in 2000 to 17 per million in 2013. The estimated number of measles-specific deaths in the WHO South-East Asia Region in 2012 (52 700 deaths) was 63% lower than the estimate in 2000 (141 200 deaths). The measles-specific mortality estimates are not available for 2013. Meanwhile, in 2013, six countries in the Region had an immunization coverage exceeding 90% for the first dose of measles vaccine. Three countries had coverage exceeding 80% and two countries had coverage between 70% and 80% for the same vaccine. Nine of 11 countries (82%) offered a second dose of measles-containing vaccine through routine immunization. All countries in the Region conducted surveillance for measles and rubella, and had access to at least one proficient measles/rubella laboratory in the network. Epidemiological evidence to date suggests that Bhutan, Democratic People’s Republic of Korea, Maldives and Sri Lanka may have eliminated transmission of indigenous measles. However, this is subject to verification. Transmission is ongoing in seven countries, though it is at a low level in Bangladesh, Nepal and Thailand.

Despite the optimism and technical feasibility, a multitude of challenges lie in the road ahead to reach the goal of measles elimination in a time span as short as 5.5 years. Increasing routine immunization coverage is a big task, especially in large countries. Of the 9 million children in the Region estimated to have missed the first measles dose in 2012, 0.9 million lived in Indonesia and 6.4 million in India. This calls for implementation of strategies to achieve high and homogeneous coverage in India and Indonesia. The silver lining is that many innovative activities have been planned and implemented to achieve a high coverage by these two Member States, and these thoroughly deserve back-up to continue the good work.

Measles elimination occurs against a background of a well-performing surveillance system. Hence, intensive efforts are required to further strengthen case-based laboratory-supported surveillance. Based on the experience of the battle against poliomyelitis, another anticipated challenge is to ensure effectiveness of the measles vaccine in diverse settings in the vast landscapes of the Region. While this aspect is important from the perspective of ensuring seroconversion in recipients, multiple stakeholders will have to contemplate how to ensure adequate vaccine supply, with the high demand generated subsequent to the initiative to eliminate measles by 2020. Funding will be another bottleneck in this endeavour. However, with contributions from external partners and Member States’ initiatives, such as covering vaccine costs by India and Indonesia, the picture does not seem to be as bleak as one might have expected.
In conclusion, it is clear that elimination of measles by 2020 in the WHO South-East Asia Region is achievable. However, this will not be business as usual. Optimal levels of support from regional systems and adequate human resources, coupled with strong support of partners directed towards implementation of the recommended strategies in Member States, with special focus on India and Indonesia, are paramount for success. Member States need to be empowered through a strong laboratory-backed surveillance network to move quickly to a “prediction mode” instead of a “reaction mode” to respond to measles outbreaks as and when they occur. Conditional on meeting these requirements, the Region is at the threshold of recording another success story of public health in little less than 6 years after achieving a polio-free status.

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**REFERENCES**


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