The World Health Organization announced that Sri Lanka has eliminated measles, interrupting transmission of the indigenous virus that causes the killer childhood disease, measles which causes devastating complications.

"Sri Lanka’s achievement comes at a time when globally measles cases are increasing. The country’s success demonstrates its commitment, and the determination of its health workforce and parents to protect children against measles," said Dr Poonam Khetrapal Singh, Regional Director WHO South-East Asia, congratulating Sri Lanka in July 2019.

An independent verification committee of the South East Asia Region annually reviews country specific measles situation in all 11 member countries in the Region. These reviews include an annual update in areas of surveillance, laboratory investigations, immunization and quality of data. These verifications include country specific annual update designed in the way that relevant data are reviewed in relevant to 3 criteria and 5 lines of evidence to support the identifying the country progress. The 3 criteria and 5 lines of evidence to support the 3 criteria are given below.

3 criteria:
1. documentation of the interruption of endemic measles or rubella, virus transmission for a period of at least 36 months from the last known endemic case
2. The presence of high quality surveillance system that is sensitive and specific enough to detect imported and import –related cases
3. Genotyping evidence that supports the interruption of endemic transmission.

The annual update included evidence reviewed with data and indicators related to the following 5 lines of evidence:

1.Description of the epidemiology of measles and rubella since the introduction of measles and rubella vaccine in the national immunization programme
2. Population immunity presented as a birth cohort analysis with the addition of evidence related to any marginalized and migrant groups;
3. Quality of epidemiological and laboratory surveillance systems for measles
4. Sustainability of the national immunization programme including the resources for mass campaigns, where appropriate, in order to sustain measles elimination
5. Genotyping evidence that supports interruption of measles and rubella virus transmission

The reviewed country specific annual updates on measles in detail, all data and ongoing efforts for measles elimination in the country concluded that Sri Lanka has stopped transmission of indigenous measles virus. The Regional Verification Committee identified that the last reported case of measles by an indigenous virus was in May 2016. Sporadic cases, reported in the last three years have all been importations that were quickly detected, investigated and rapidly responded to by health staff at all levels.

Sri Lanka is successful in this as its persistent efforts and sustaining programmes to ensure maximum coverage with two doses of measles and rubella containing vaccines in the National Immunization Programme. The vaccination coverage in the country has been consistently high achieving over 95% with both the first and second dose of measles and rubella containing vaccines. Additionally, large scale measles catch-up vaccination campaigns have been conducted in 2001-2003. This aimed to provide a second dose of measles containing vaccine to those who have received only one dose of measles vaccine at the age of 9 months from 1984 to 2001 as 2nd dose of measles containing vaccine has been started only in 2001.
to 3-year-old children. However, outbreak response supplementary immunization activity to vaccinate 6-12 months has been conducted in 2014 with high coverage of 96% based on the epidemiology of the outbreak situation in 2013-14.

The country has a strong sensitive surveillance system and all vaccine-preventable diseases are an integral part of the communicable disease surveillance system. Measles has been a notifiable disease in the country for decades and country has changed the surveillance case definition to more sensitive “fever and maculopapular rash” surveillance in 2017 in which more attention to identify and investigate more suspected or possible measles cases to exclude as none-measles cases after laboratory confirmation.

However, at this juncture, the risk of importations of measles virus from other endemic and outbreak countries will remain for the country as Sri Lanka is a more tourist destination, as well as significant population movement, exists with interests for trade and travel.

The Regional Director for South-East Asia, Dr Poonam Khetrapal Singh announced that Sri Lanka as achieved elimination standards for the endogenous measles based on global measles elimination criteria as an achievement of a regional country, at the South-East Asia Regional Immunisation Technical Advisory group meeting (SEAR-ITAG). The country has identified the requirement of further strengthening of immunity of the vulnerable population of higher age cohorts in preventing country specific transmission from imported cases. The country capacities to detect and readiness to respond to measles virus both at the national and sub-national levels would be the key to the country to continue with measles-free status. There are flagship priority programmes of WHO in the Region, ahead of the 2020 regional targets in which Measles elimination and rubella control is an important identified priority. Elimination of measles is achieved when a country interrupts transmission of indigenous virus for three years. Rubella control is achieved when a country reduces the number of rubella cases by 95% as compared to cases in 2008.

Under such programmes, Sri Lanka is the fourth country in WHO South-East Asia Region, after Bhutan, Maldives and Timor-Leste, to eliminate measles and control rubella. Last year Sri Lanka achieved the status of rubella control, along with five other countries - Bangladesh, Bhutan, Maldives, Nepal and Timor-Leste. The achievements in the measles elimination and free status or very low levels of vaccine preventable diseases are mainly the commitment and challenging tasks carried out by all health staff at all levels and the demand for vaccine created among the public. In Sri Lanka, health services are catered to the public with priority concern of easy access to health care, in which geographical access is mainly attended. The infrastructure of the public health system established in the way that all geographical areas are owned by an identified public health staff to serve and do not consider population categories as hard to reach population and the underserved in considering access to health care services, mainly on immunization services.

However, while applauding the achievements of measles elimination in the country in 2019, ahead of the country target year of 2020, Sri Lanka has identified the challenges ahead of post elimination period. In case of imported case, with country specific transmission continued for continuously by the same imported viral strain for 12 month period, it will not further considered as eliminated and the country will become again endemic for that particular strain. In fact, early detection of all imported cases, adequate investigation of sampling of nasal and throat swabs for virus detection and strain identification, outbreak control at earliest and addressing if any population level immunity gaps are the essential requirement.

The efficiency of Measles elimination programme, measles national reference laboratory and national immunization programme and the commitment of curative and public health staff at all levels for specific tasks are depicted in sustaining measles elimination status in the country in this post-elimination period.
Table 1: Selected notifiable diseases reported by Medical Officers of Health 20th - 26th July 2019 (30th Week)

<table>
<thead>
<tr>
<th>Disease</th>
<th>Wilpattu</th>
<th>Anuradhapura</th>
<th>Kegalle</th>
<th>Ratnapura</th>
<th>Kalmunai</th>
<th>Matara</th>
<th>Jaffna</th>
<th>Mannar</th>
<th>Vavuniya</th>
<th>Matara</th>
<th>B-Dom</th>
<th>Batticaloa</th>
<th>Batticaloa</th>
<th>Skuna</th>
<th>Puthalam</th>
<th>Puttalam</th>
<th>Ampara</th>
<th>Trincomalee</th>
<th>Trincomalee</th>
<th>Kalmunai</th>
<th>Kegalle</th>
<th>Ratnapura</th>
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<td>78</td>
<td>957</td>
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<td>45</td>
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<td>434</td>
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Source: Weekly Return of Communicable Disease (WRCD)
### Table 2: Vaccine-Preventable Diseases & AFP

<table>
<thead>
<tr>
<th>Disease</th>
<th>No. of Cases by Province</th>
<th>Number of cases during current week in 2019</th>
<th>Number of cases during same week in 2018</th>
<th>Total number of cases to date in 2019</th>
<th>Total number of cases to date in 2018</th>
<th>Difference between the number of cases to date in 2019 &amp; 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFP*</td>
<td>W 00 C 00 S 00 N 00 E 00</td>
<td>01</td>
<td>01</td>
<td>47</td>
<td>38</td>
<td>23.6 %</td>
</tr>
<tr>
<td>Diphtheria</td>
<td>W 00 C 00 S 00 N 00 E 00</td>
<td>00</td>
<td>00</td>
<td>00</td>
<td>00</td>
<td>0 %</td>
</tr>
<tr>
<td>Mumps</td>
<td>W 01 C 00 S 00 N 00 E 00</td>
<td>02</td>
<td>00</td>
<td>04</td>
<td>06</td>
<td>-0.9 %</td>
</tr>
<tr>
<td>Measles</td>
<td>W 00 C 00 S 03 N 01 E 03</td>
<td>08</td>
<td>00</td>
<td>209</td>
<td>77</td>
<td>171.4 %</td>
</tr>
<tr>
<td>Rubella</td>
<td>W 00 C 00 S 00 N 00 E 00</td>
<td>00</td>
<td>00</td>
<td>00</td>
<td>04</td>
<td>0 %</td>
</tr>
<tr>
<td>CRS**</td>
<td>W 00 C 00 S 00 N 00 E 00</td>
<td>00</td>
<td>00</td>
<td>00</td>
<td>00</td>
<td>0 %</td>
</tr>
<tr>
<td>Tuberculosis</td>
<td>W 73 C 12 S 07 N 10 E 28</td>
<td>11</td>
<td>20</td>
<td>166</td>
<td>81</td>
<td>0.8 %</td>
</tr>
</tbody>
</table>

**Number of Malaria Cases Up to End of July 2019, 02 All are Imported!!!**

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Comments and contributions for publication in the WER Sri Lanka are welcome. However, the editor reserves the right to accept or reject items for publication. All correspondence should be mailed to The Editor, WER Sri Lanka, Epidemiological Unit, P.O. Box 1567, Colombo or sent by E-mail to cepid@sltnet.lk. Prior approval should be obtained from the Epidemiology Unit before publishing data in this publication.

**ON STATE SERVICE**

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