Annex 2: Sixth meeting of the European Regional Verification Commission for Measles and Rubella Elimination, 15–17 June 2017, Bucharest, Romania: Conclusions and recommendations

The RVC noted that the WHO European Region continues to make progress towards measles and rubella elimination. It acknowledged and greatly appreciates the continued personal interest, support and advocacy of the WHO Regional Director for Europe and senior staff of the WHO Regional Office for Europe (Regional Office).

The RVC furthermore thanked the Regional Office for the opportunity to conduct a face-to-face meeting with representatives from Romania, and thanked the representatives from Romania's National Verification Committee, Ministry of Health and National Institute of Public Health for their open, honest and thorough deliberations during the discussion. The RVC acknowledged the efforts being made to improve vaccination coverage in Romania, particularly in vulnerable communities, and recognized that these efforts are challenged by current political complexities. The RVC expects that improvements in vaccine procurement and supply and the proposed new legislation on immunization will mitigate challenges to achieve high routine vaccination coverage, but noted that more innovative measures will probably also be required.. In addition, the RVC considered that greater efforts and strengthened SIAs would be needed to increase vaccination coverage among infants and children aged 9 months to 5 years and to end the current measles outbreak.

The RVC acknowledged the ongoing partnerships of the Regional Office with the United Nations Children's Fund (UNICEF), United States Centers for Disease Control and Prevention (US CDC) and the European Centre for Disease Prevention and Control (ECDC) and expressed appreciation for these partners' participation in promoting and supporting country efforts to achieve measles and rubella elimination.

Annual status updates (ASUs) for 2016 were received from all 51 Member States that have initiated the verification process and established NVCs. However, 24 of the 51 reports were received after the agreed deadline for submission. While the quality of reports has generally improved over the past few years, several NVCs have consistently either failed to provide the requested information on the quality of surveillance indicators, or provided information that was incomplete or incorrectly calculated. Despite requests from the RVC, some NVCs continued to use alternative self-developed surveillance indicators

that are incompatible with those requested, or are of uncertain value to assess surveillance quality. Once again, the RVC noted that vaccination coverage data were not provided in several ASUs, or the information was outdated or difficult to interpret due to insufficient information on data sources and methods used to estimate coverage, making it impossible to realistically assess population immunity. The RVC commended all efforts by the Secretariat to clarify or obtain additional information where needed, resolve conflicting data during country missions and communicate with counterparts in countries.

The RVC concluded that based on reports submitted, as of the end of 2016:

- 42 (79%) of the 53 Member States in the European Region had interrupted endemic measles transmission;
- 37 Member States (70%) had interrupted endemic rubella transmission;
- 33 (62%) Member States had demonstrated elimination of endemic transmission of measles for at least 36 months;
- 33 (62%) Member States had demonstrated elimination of endemic transmission of rubella for at least 36 months;
- 2 (4%) Member States had interrupted measles transmission for 24 months;
- 2 (4%) Member States had interrupted rubella transmission for 24 months;
- 7 (13%) Member States had interrupted measles transmission for 12 months;
- 2 (4%) Member States had interrupted rubella transmission for 12 months;
- 9 (17%) Member States were endemic for measles transmission;
- 14 (26%) Member States were endemic for rubella transmission;
- 9 (17%) Member States were endemic for both measles and rubella transmission.

The RVC was unable to review the measles and rubella status of two (4%) Member States: Monaco and San Marino.

The RVC acknowledged the added value of appointing technical coordinators among the Secretariat staff to more effectively target priority countries, sustain coordination and provide technical support, as well as the benefit of increasing the Secretariat's capacities with consultants and secondees. Modifications made to the ASU review process, with a redistribution of countries among RVC and Secretariat members based on measles and rubella elimination status, introduction of two primary reviewers for priority countries and changes to the responsibilities of the laboratory expert member of the RVC, have

effectively streamlined the review process, allowing RVC members to reach their conclusion on the elimination status in a timelier manner than in the past. These practices should be continued in future annual reviews.

The RVC again noted that despite continued improvement, the extent and quality of surveillance remains suboptimal in many countries, especially in regards to rubella and congenital rubella syndrome (CRS). As the Region moves towards measles and rubella elimination, the ability to distinguish between remaining endemic transmission and import-related sporadic cases becomes crucial to the verification process. It is of utmost importance that laboratory data be interpreted in conjunction with epidemiological information. The RVC recommends the use of maps showing the geographic distribution of confirmed and discarded cases of measles and rubella. Molecular epidemiology of sporadic cases and chains of transmission, linking genetic and epidemiological data, is critical for documenting elimination. It is also paramount that measles and rubella suspected cases are detected and reported, and that adequate samples from at least 80% of suspected cases are collected and tested in WHO-accredited laboratories or laboratories of known and documented proficiency. In reviewing the 2016 reports the RVC relied substantially on available genotyping data to determine whether the evidence provided supported the conclusion that reported cases were not due to endemic transmission. Most Member States are now reporting measles virus genomic sequence data to the Measles nucleotide surveillance database (MeaNS), but the volume of sequence data reported to the Rubella nucleotide surveillance database (RubeNS) remains very low. The importance of genomic sequence data, and the ability to detect and document chains of transmission, will continue to rise as more Member States achieve interruption of transmission. The RVC recognized the critical role of MeaNS and RubeNS in supporting comprehensive analyses of measles and rubella viral sequences and acknowledged their invaluable contribution to the verification process.

The RVC reiterated its proposal to conduct more missions to Member States and strengthen communications with the NVCs as this contributes significantly to the RVC's understanding of the challenges and situations in the different countries and provides a larger evidence base from which conclusions can be drawn.

Advancement of the annual RVC meeting from October to June resulted in a more timely assessment of measles and elimination status, the outcome of which can be used more effectively to promote regional achievements and advocate for elimination. The RVC proposed further enhancements, which will be investigated by the Secretariat for discussion with the RVC.

Uncertainties around the assessment of vaccination coverage data provided and the level of protection or susceptibility in a population remain of concern to the RVC. This concern is compounded by the absence of current or recent data in some Member States. It would be helpful to the RVC if the Secretariat explored the possibilities of developing country immunity profiles that could be used to assess the likelihood and identify locations of pockets of susceptibility to measles or rubella.

Recommendations

- To NVCs
    - With gratitude for their adherence to the revised annual calendar for the verification process, the RVC requests that NVCs make every effort to provide a comprehensive ASU in advance of the agreed deadline for submission provided by the WHO Secretariat.
    - Submitted ASUs should include an explanation for any missing, incomplete or alternative information and provide supporting documentation where possible.
    - ASUs that include surveillance performance indicators other than those recommended by WHO should include clear definitions of those indicators and an explanation of how they are used to demonstrate the quality of measles and rubella surveillance.
    - NVCs are again urged to ensure that all available information on current vaccination coverage at national and subnational levels is provided in the ASU. This information should include the source of data and methodology used to estimate coverage.
- To Member States
    - With gratitude to national public health systems for adhering to the revised annual calendar for the verification process, the RVC reiterates its reminder that national health authorities are responsible for ensuring that adequate information and documentation on imported and import-related measles and rubella cases, including available epidemiological information and details on the geographical source of the importation, are provided to their NVC for inclusion in the ASU. Preparation of a high-quality ASU requires the active collaboration of national health agencies and experts with the NVC.
    - The RVC urges Member States to fully implement the immunization and surveillance strategies and activities outlined in the relevant WHO documents, and to ensure that the following are in place and adequately supported:
        - sustained high routine immunization coverage with two doses of measles- and rubella-containing vaccines, with vaccines given on time as per the national immunization calendar;

        - supplemental immunization activities focused on susceptible populations;
        - high-quality measles and rubella surveillance, which entails collection of adequate clinical specimens, laboratory testing and classification/confirmation of at least 80% of suspected cases, and genotyping of at least 80% of chains of transmission and sporadic cases through the WHO-accredited laboratories of the Measles and Rubella Laboratory Network (MR LabNet) and/or proficient laboratories.
    - Member States are urged to ensure that laboratory testing is conducted by WHO-accredited laboratories or laboratories of documented proficiency.
- To the Secretariat
    - The RVC encourages the WHO Secretariat to investigate opportunities to extend the current arrangement of RVC telephone conferencing to include more advanced online conferencing and information sharing capacities and tools (e.g. using a platform such as WebEx).
    - The RVC invites the Secretariat to continue developing reporting requirements for documenting elimination status in Member States that have failed to establish NVCs (Monaco and San Marino), and to consider missions to these Member States as an option.
    - The Secretariat is urged to invite the participation of RVC members in planned country visits, to facilitate their review and promotion of measles and rubella elimination activities and to provide information and advice related to the verification process.