

Measles and Rubella- Session 6

This session is divided into four separate areas as follows:

1. Global and regional update:

This short session is intended to update the SAGE on the progress towards measles and rubella regional and global goals and highlights the key challenges. This session is for information only.

The measles and rubella chapters of the GVAP report (available in the SAGE web under the GVAP session) provide a summary of the global status for both diseases.

2. Feasibility of MR eradication:

At 2017 WHA, DG was requested to report through the EB to the 2020 WHA “on the epidemiological aspects and feasibility of, and potential resource requirements for, measles and rubella eradication, taking into account the assessment of the SAGE.”

This session is intended to brief the SAGE on the ongoing work to address the request and obtain their feedback and guidance. The session is focused on the process, the structure and broadly, the content of the report. The SAGE is reminded that the feasibility of measles eradication has been assessed and a report of the previous assessment has been shared in the web. Further, the SAGE, at its November 2010 meeting, have indicated that measles eradication is indeed feasible “.....SAGE concluded that measles can and should be eradicated. A goal for measles eradication should be established with a proposed target date based on measurable progress made towards existing goals and targets. The eradication of measles represents unique disease control and developmental opportunities, and should be carried out in the context of strengthening routine immunization programmes”. The request from the 2017 WHA is on the feasibility of eradication of measles and rubella as well as the costs. The document in the yellow book provides broad headings for topics and areas that will be covered in the report. In addition the following documents are provided in the SAGE web:

- The published report ITFDE 2015 meeting on measles eradication in 2015
- Proceedings of the meeting to assess the feasibility of measles eradication held in 2010

3. Co-administration of YF vaccine with measles containing vaccine:

Current guidance in the rubella position paper (2011) states that:

“RCVs can be administered concurrently with inactivated vaccines. As a general rule, live vaccines should be given either simultaneously or at least 4 weeks apart..... [Interference may occur between MMR and yellow fever vaccines if they are simultaneously administered to young children. In a study published in 2011, 57 seroconversion rates were lower when yellow fever and MMR vaccines were co-

administered to infants aged 12 months than when yellow fever vaccine was administered 30 days after MMR (rubella, 90% versus 97%; yellow fever, 70% versus 87%; mumps, 61% versus 71%).

Seroconversion rates for measles were >98% in both groups. Difference in the timing of the blood draw for MMR recipients (30 days versus 60 days), but not for yellow fever vaccine recipients, may have effected MMR seroconversion rates. Therefore, *it may be prudent for routine immunization programmes to avoid simultaneously administering yellow fever vaccine and MMR to children aged <2 years.*"

In light of studies conducted since the 2011 WHO rubella position paper, a review was conducted to review evidence on the immunologic response to measles-containing vaccines (MCVs) and yellow fever (YF) vaccines when co-administered. The yellow book document summarizes the findings and conclusions of this review. For readers interested in the details of the published studies discussed, the following can be found at the SAGE website:

- Brazil study: Mutual Interference on the immune response to yellow fever vaccine and a combined vaccine against measles, mumps and rubella."
- Gambia study: "Safety and Immunogenicity of inactivated poliovirus vaccine when given with measles-rubella combined vaccine and yellow fever vaccine and when given via different administration routes: a phase 4, randomized, non-inferiority trial in The Gambia."
- Appendix for the Gambia study
- The France study "CHRONOVAC VOYAGEUR: A study of the immune response to yellow fever vaccine among infants previously immunized against measles."

3. Country classification and guidance to increasing population immunity:

During the October 2017 SAGE, The SAGE reviewed and endorsed four categories that were proposed for classifying countries, based on their level of disease control and likelihood of achieving and sustaining measles and rubella elimination. However, SAGE noted that countries in the endemic category include countries at different levels of control and that further subcategories should be explored to inform corrective actions. This work was conducted and presented for feedback at the April 2018 SAGE. This session and proposed recommendations are submitted for a decision from the SAGE. The document in the yellow book provides guidance to identify and address measles and rubella immunity gaps in order to raise population immunity. Countries' epidemiologic profiles as well as their program capacities are used to help prioritize interventions to increase population immunity. In addition, data sources for estimating immunity gaps and strategies to address specific immunity gaps are provided. Of note, this guidance document does not address surveillance or other components of the measles and rubella control/elimination strategies. The focus is on increasing population immunity through identifying and addressing immunity gaps.