

Measles and Rubella- Session 4

Objectives of this session:

1. Review findings of the rubella systematic review and proposed updates to WHO's current rubella vaccine policy recommendations.
2. Review the Feasibility Assessment of Measles and Rubella Eradication, including modelling of the epidemiological impact and cost-effectiveness of different programme performance scenarios.

The session is divided into 3 separate areas as follows:

1. **Global and regional update:**

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

2. **Rubella vaccine:**

In order to update the current rubella position paper (2011), a systematic review was undertaken to assess any new evidence on immunogenicity, efficacy and effectiveness, duration of protection, serious adverse events, administration to children <9 months of age, and risk of adverse events when rubella containing vaccine (RCV) is administered in pregnancy.

The document in the yellow book summarizes the findings from the systematic review. In addition the following document is provided on the SAGE web:

- Full systematic literature review and meta-analyses of the immunogenicity, duration of immunity, effectiveness/efficacy and safety of rubella vaccination.

Three policy updates are proposed for inclusion in the revised rubella position paper, two of which have already been discussed and endorsed by SAGE:

1. **Co-administration of yellow fever and rubella vaccines.** (SAGE October 2018) The position paper will be updated to continue recommending YF/rubella be co-administered or given at least 4 weeks apart, with removal of all cautionary statements about co-administration.
2. **Health worker vaccination.** (SAGE November 2013) The language in the position paper will be updated to recommend all health workers have evidence of immunity to rubella, with verification of vaccination and/or immunity to be part of standard infection control guidelines or health worker standards.
3. **Removal of the vaccination strategy to reduce congenital rubella syndrome through vaccinating only women of reproductive age.** A review of issues with this strategy will be provided to SAGE for discussion.

3. Feasibility of measles and rubella eradication:

At 2017 World Health Assembly (WHA), the Director General was requested to report through the WHO Executive Board 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.”

In order to better understand the investment, consequences and value-for-money of efforts to eliminate measles and rubella transmission globally, the relative impact, cost and cost-effectiveness of different strategies for measles-rubella elimination (and potential eradication) have been modelled by a consortium of mathematical modelers. These transmission models projected long-term cases, deaths, and DALYs, along with the number and type of vaccinations given, under four vaccination coverage scenarios. To evaluate the cost-effectiveness of different scenarios, these outputs were used in an economic model which estimated the direct costs of vaccination and treatment associated with each scenario.

SAGE will be presented with the findings of the modeling exercise and economic evaluation.

SAGE will then be provided an overview presentation of the Feasibility Assessment of Measles and Rubella Eradication and a summary of the conclusions and recommendations of that report.

The Feasibility Assessment of Measles and Rubella Eradication as well as a description of the programme scenarios modelled is included in the yellow book. In addition the following documents are provided on the SAGE web:

- A full description of the modelling and economic analysis conducted to inform the feasibility assessment.