

WHO-EM/EPI/343/E

Summary report on the

# Fifteenth intercountry meeting on measles/rubella control and elimination

Amman, Jordan  
22–25 November 2014



**World Health  
Organization**

Regional Office for the Eastern Mediterranean

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Document WHO-EM/EPI/343/E/01.15

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## **1. Introduction**

The WHO Regional Office of the Eastern Mediterranean organized the fifteenth intercountry meeting on measles and rubella control and elimination in Amman, Jordan on 22–25 November, 2014. The meeting was part of series of back-to-back related meetings which also included the 28th intercountry meeting of national managers of the Expanded Programme on Immunization (16–19 November 2014), meeting of Chairpersons of National Immunization Technical Advisory Groups (NITAGs) of countries of the Eastern Mediterranean Region (20 November 2014) and meeting of the focal points on the national measles/rubella laboratories in countries of the Region (21 November 2014).

The objectives of the meeting were to review country progress towards achieving the regional measles elimination target, follow up on implementation of the different components of regional strategy for measles elimination and review and update the national plans for strengthening measles/rubella elimination and control programmes.

The meeting was attended by delegates from all countries of the Region, WHO immunization and polio-related staff from country, regional and headquarters level, as well as by representatives of different partners including the Centers for Disease Control and Prevention (CDC Atlanta), GAVI Alliance and UNICEF.

The meeting was inaugurated by Dr Ezzeddine Mohsni, Acting Director, Communicable Disease Prevention and Control, WHO Regional Office for the Eastern Mediterranean. Dr Rana Safdar (Pakistan) chaired the meeting.

The meeting entailed three main sessions: the global and regional situation; progress in achieving and sustaining population immunity against measles and rubella; and progress in achieving the target of

measles/rubella surveillance performance indicators. Two break-out group work sessions were dedicated to discussing in detail country situations with regard to achieving the required population immunity and its impact on measles/rubella occurrence, as well as the situation of measles rubella surveillance. The group work discussion dedicated time for following up on implementation of the planned activities in 2013–2014 and discussing the planned activities for 2014–2015. A third group work session was dedicated to drafting national plans for activities related to strengthening all aspects of EPI, including the technical support required for implementation of the planned activities.

The countries and the partners expressed their appreciation for the level of the technical discussion, the input, active participation and transparency in sharing information by the delegates from all countries

## **2. Conclusions**

Participants discussed the reduction in the total number of measles cases in 2014 compared to the same period of 2013. They noted the progress made by several countries of the Region and commended the continuous achievement of Bahrain, Oman and Palestine, that have reported no endemic measles virus transmission for three years or more, and the Islamic Republic of Iran, Morocco and Tunisia, which had very low measles incidence in 2013–2014. The participants commended also the action taken by Jordan and Lebanon to control measles outbreaks in 2013 and the subsequent reduction in measles incidence in the two countries in 2014.

Concern was expressed about the significant increase in the number of measles cases in Egypt and Iraq over the past two years. As well, a large number of measles cases occurred in Sudan in 2014, despite the high reported administrative coverage of the measles supplementary immunization activities that were implemented late 2013. Concern was

also raised about the large number of measles cases in several countries reporting high coverage with 2 doses of routine measles vaccine and/or high coverage of recent supplementary immunization activities, including Kuwait, Qatar and the United Arab Emirates.

Participants concluded that there is a high likelihood that the regional target for measles elimination by 2015 will not be achieved in most countries and they underlined the need for accelerating efforts to achieve the target.

The meeting reiterated the validity of recommendations of previous meetings and issued a number of additional recommendations.

### **3. Recommendations**

#### *To all countries*

1. Countries are strongly urged to strengthening routine vaccination services to achieve high coverage with the 2 doses of measles vaccines at the district level. Countries should follow up the MCV1/MCV2 drop-out rate and implement appropriate measures to minimize the drop-out, including raising population awareness and defaulter tracing.
2. Countries undertaking supplementary immunization activities should ensure high quality activities through proper planning, optimum implementation, monitoring and supervision. Countries are also urged to conduct post-activity coverage evaluation surveys and implement mop-up activities where needed.
3. Countries reporting high coverage of routine measles vaccination, including those with low reported measles incidence and those experiencing frequent outbreaks/high endemicity, should consider validating the measles vaccination coverage data through conducting

data quality self-assessment (DQS) and/or vaccination coverage evaluation surveys periodically.

4. All countries are urged to strengthen measles case based laboratory surveillance and achieve the required measles surveillance performance indicators at the district level
5. In view of the current constrained global supply, especially for MMR vaccines, countries should exercise long-, mid- and short-term forecasting to guide the vaccine industry in planning production of appropriate vaccines. In order to avoid supply shortages, countries should ensure timely contracting and procurement of vaccines and other immunization supplies.
6. If procurement is to take place through UNICEF, countries should ensure advance planning of vaccine procurement. On average, 8–12 weeks needs to be allowed for delivery of vaccines from the time of release of funds until arrival in the country. For large-scale campaigns that require significant quantities of vaccine, longer lead times may apply.
7. All countries to move to weekly reporting of measles/rubella case based surveillance data to the WHO Regional Office and to ensure timely reporting of measles/rubella outbreaks.
8. Countries are urged to strengthening human resource capacity to respond to the requirements for measles elimination activities.
9. All countries are to report to the next meeting on action taken on implementation of recommendations of the meeting.

*To WHO and partners*

10. Provide necessary technical support to the countries for:
  - planning, implementation, monitoring and evaluation of supplementary immunization activities
  - strengthening case-based laboratory surveillance of measles and rubella
  - verifying elimination of measles in the relevant countries.

11. Conduct a regional training workshop on measles elimination verification procedures for countries close to verifying elimination.
12. Support Egypt, Iraq and the Syrian Arab Republic to expedite registration of available WHO prequalified measles-containing vaccines.

*To specific countries*

**Afghanistan**

- Improve routine vaccination coverage of MCV and monitor the Penta1-MCV1 and MCV1-MCV2 dropout rates and implement appropriate measures to minimize drop out, including proper implementation of the RED approach, raising population awareness and defaulter tracing.
- Ensure proper planning and implementation of the measles supplementary immunization activities planned for 2015 and supported by GAVI, using appropriate readiness assessment dashboard to ensure adequate preparation.
- To address the low measles surveillance performance indicators, strengthen measles/rubella case-based surveillance through extensive training of health workers on measles/rubella surveillance and case investigation and raising awareness among all health professionals on the importance of reporting all fever/rash suspected cases.

**Bahrain**

- In light of the recent 3-cluster outbreaks of measles in an under-vaccinated special population/high-risk community, and occurrence of hospital transmission of the disease:
  - strengthen routine immunization and ensure adequate screening for vaccination status on pre-school and school entry;
  - review hospital infection control practices and health-care worker vaccination policy and apply corrective measures as needed.

- In light of the occurrence of a relatively large number of rubella cases among Bahraini and non-Bahraini aged < 5 years, consider reviewing the vaccination schedule to implement the second dose of MMR during the second year of age instead of the current schedule at school entry and use school entry as an opportunity for checking vaccination status.
- In view of the high routine vaccination coverage in Bahrain and the possibility of false positive cases of rubella due to cross reactions, where there are rubella IgM positive cases without supportive epidemiologic evidence, consider reviewing rubella case investigation procedures and introducing additional diagnostic evaluations (e.g. testing for parvovirus B19 and other pathogens).

### **Djibouti**

- Strengthen routine vaccination services, through implementation of the RED approach, to achieve high coverage with the 2 doses of measles vaccines at the district level.
- Follow up the MCV1/MCV2 drop-out rate and implement appropriate measures to minimize the dropout rate, including raising population awareness and defaulter tracing.
- Conduct a measles follow-up campaign in 2015 to cover population immunity gaps resulting from relatively low coverage of MCV1 and MCV 2 and the fact that the last measles follow-up campaign was done in 2012.
- Establish measles/rubella case based laboratory surveillance, utilizing the available support from the Regional Office and other partners.

### **Egypt**

- In view of the rapidly increasing incidence of measles along the past 2 years, especially among the younger age group, and the shortage of MCV that Egypt is facing, Egypt should:
  - Ensure regular availability of measles-containing vaccine and expediting registration of available WHO prequalified vaccines

- Restore the strength of routine immunization activities and implement outreach activities in the low coverage districts.
- Develop and implement communication and social mobilization strategy to improve population demand to vaccination, especially in the slum areas
- Implement a nationwide follow-up campaign, using MR or MMR vaccine (if available) targeting appropriate age group, based on disease epidemiology.
- In view of the under reporting of measles cases, Egypt should strengthen measles/rubella case-based surveillance through:
  - Extensive training of health workers on measles/rubella surveillance and case investigation
  - Raising awareness among all health professionals on the importance of reporting all fever/rash suspected cases
  - Instituting specimen collection in all health facilities receiving suspected cases (not only in the hospitals) through appropriate training and supply of specimen collection kits.

### **Islamic Republic of Iran**

- Consolidate elimination activities in order to achieve interruption of endemic transmission of measles by 2015.
- Prepare for documentation for measles elimination verification. The National Verification Committee should meet regularly to guide the country towards completing elimination activities.

### **Iraq**

- In view of the decreasing routine vaccination coverage along the past 6 years and in view of the rapidly increasing incidence of measles, especially among the younger age group during the past 2 years, and in view of the current vaccine shortage, Iraq should:
  - Ensure regular availability of measles-containing vaccine and expedite registration of available WHO prequalified vaccines

- Strengthen routine vaccination services to achieve high coverage with the 2 doses of measles-containing vaccines at the district level
- Follow up the MCV1/MCV2 dropout rate and implement appropriate measures to minimize drop out, including raising population awareness and tracing defaulters
- Implement a nationwide follow up campaign, using MR vaccine, targeting appropriate age group based on disease epidemiology.

### **Jordan**

- Despite the significant reduction in measles cases in 2014 compared to 2013, Jordan needs to exert additional efforts to restore the status of interruption of endemic measles virus transmission through strengthening routine immunization and conducting targeted supplementary immunization activities.
- In view of the low measles surveillance performance indicators, especially the reporting rate, Jordan should strengthen measles/rubella case-based surveillance through extensive training of health workers on measles/rubella surveillance and case investigation and raising awareness among all health professionals on the importance of reporting all fever/rash suspected cases.
- Improve the functionality of the expert committee and consider replacing inactive members to ensure regular meetings of the committee.

### **Kuwait, Qatar, Saudi Arabia and United Arab Emirates**

In view of the continued outbreaks of measles, despite the high reported routine vaccination coverage with 2 doses of MCV and the several supplementary immunization activities conducted in each country, and in view of the relatively common epidemiological and social situation and geographical proximity of the 4 countries, the following actions are recommended.

- Strengthening routine immunization

- Review the routine immunization policy and review the routine immunization schedule to provide the second dose of measles-containing vaccine during the second year of life in order to prevent accumulation of susceptible children, and check completeness of the vaccination schedule at school entry.
- Conducting timely and synchronized MR/MMR campaigns targeting a wide age-range population
  - Target age group should be based on the epidemiology of measles and rubella in each country.
  - Ensure high quality supplementary immunization activities through proper timely planning, adequate district microplanning, and optimum implementation, monitoring and supervision of the immunization activities.
  - Conduct post supplementary immunization activities coverage evaluation survey and implementing mop-up activities where needed.
- Improving immunization data quality
  - Review data sources for population denominators, especially for non-national populations, and use the most accurate and up-to-date figures to calculate administrative immunization coverage.
  - Conduct periodic validation of the measles vaccination coverage data using Data Quality Self assessment (DQS) every 2–3 years and coverage evaluation surveys every 5 years.
  - Improve human resource capacity for immunization data management, data analysis and interpretation and using data for action.
- Strengthening measles/rubella surveillance
  - Strengthen all aspects of measles/rubella case-based laboratory surveillance, especially the procedure for case investigation and filling in the case investigation form. Ensure availability of trained staff for this purpose.
  - Kuwait is the only country of the Region which has not reported any data to the Regional Office in 2014. Kuwait should ensure

regular reporting of measles/rubella surveillance data to the Regional Office.

### **Lebanon**

Despite the significant reduction in measles cases in 2014 compared to 2013, Lebanon needs to exert additional efforts to control the ongoing measles outbreak and prevent occurrence of periodic outbreaks in order to achieve measles elimination.

- Improving routine vaccination coverage of MCV
  - Monitor the Penta1-MCV1 and MCV1-MCV2 dropout rate and implement appropriate measures to minimize drop out, including proper implementation of the RED approach, raising population awareness and tracing defaulters.
  - Ensure better collaboration of the private sector in providing measles vaccination as per the national schedule.
- Strengthening measles/rubella surveillance
  - Enhance involvement of the private sector in the measles/rubella surveillance system.
  - Expand zero reporting to all reporting sites.
  - Improve involvement of the school health programme in the weekly reporting system.

### **Libya**

Despite the reported high routine vaccination coverage, Libya is repeatedly exposed to measles outbreaks. Libya should undertake more efforts in the following areas.

- Improving routine vaccination coverage of MCV: proper implementation of the RED approach, raising population awareness and tracing defaulters
- Improving immunization data quality
  - Validate the measles vaccination coverage data using data quality self assessment (DQS) and/or coverage evaluation surveys where possible.

- Strengthen national capacity for immunization data management, data analysis and interpretation and using data for action.
- Conducting national or subnational supplementary immunization activities using MR/MMR in order to curb the current outbreak
  - Target appropriate age group(s) based on the epidemiology of measles and rubella in the country and analysis of the gaps of vaccination coverage of the past few years.
  - Ensure high quality supplementary immunization activities through proper timely planning, adequate microplanning, optimum implementation, monitoring and supervision, and ensure adequate preparation for the supplementary immunization activities using an appropriate readiness assessment dashboard throughout all phases of the preparation.
  - Conduct post supplementary immunization activities coverage evaluation survey and implement mop-up activities where needed.
- Strengthening measles/rubella surveillance
  - Strengthen all aspects of measles/rubella case-based laboratory surveillance, especially the procedure of case investigation and filling in the case investigation form and specimen collection and transfer.
- Human resource capacity-building in all areas of EPI, including measles/rubella surveillance, control and elimination.

## **Morocco**

- Implement the second phase of the MR supplementary immunization activities as planned by Q4 2015, in order to consolidate measles/rubella elimination activities and interrupt endemic measles transmission by end 2015. Ensure high quality of the supplementary immunization activities through proper timely planning, adequate microplanning, communication and social mobilization, implementation of appropriate strategies to reach the target population and monitoring the preparation of activities using the

appropriate readiness assessment dashboard throughout all phases of the preparation.

- Establish a national expert committee to ensure high quality measles case classification.
- Establish a national measles/rubella elimination verification committee as soon as possible and begin its operation in 2015.

### **Oman**

- In view of the measles outbreak in 2014 in a population that was missed during previous measles supplementary immunization activities, search for other population groups that could have missed vaccination and implement catch-up vaccination schedule for older age groups as necessary.
- Continue to update measles/rubella case classification in accordance with WHO framework for verifying the elimination of measles and rubella.
- Establish a National Measles/Rubella Elimination Verification Committee as soon as possible and begin its operation in 2015 to prepare the reports to the regional verification commission to verify elimination.

### **Pakistan**

- Improve routine vaccination coverage of MCV through proper implementation of RED approach, raising population awareness and defaulter tracing. Monitor the Penta1-MCV1 and MCV1-MCV2 dropout rate and implement appropriate measures to minimize drop out, including defaulter tracing.
- Ensure proper planning and implementation of the measles supplementary immunization activities in the remaining provinces and use the appropriate readiness assessment dashboard to ensure adequate preparation.
- In view of the results of the post supplementary immunization activities coverage survey in Sindh, showing coverage less than 80%

in 17 of 18 townships/districts of Karachi, implement measles mop-up vaccination activities, with emphasis on achieving high quality, in those low performing districts/ townships. The same action should be taken for all other provinces when results of the post supplementary immunization activities coverage surveys are available.

- In view of the low measles surveillance performance indicators, strengthen measles/rubella case based laboratory surveillance through:
  - Extensive training of health workers on measles/rubella surveillance and case investigation
  - Raising awareness among all health professionals on the importance of reporting all fever/rash suspected cases with adequate investigation and collecting adequate specimens from all cases.

### **Palestine**

- Expand the reporting sites to include the private sector.
- Improve the functionality of the measles expert committee. Consider replacing inactive members to ensure regular meetings of the expert committee.

### **Somalia**

- Improve routine vaccination coverage of MCV through proper implementation of the RED approach with adequate implementation of a proper communication and social mobilization strategy.
- Ensure proper planning and implementation of the catch-up supplementary immunization activities planned for 2015 to ensure reaching high coverage in all accessible areas, with emphasis on the following:
  - targeting appropriate age groups based on the epidemiology of measles
  - allocating adequate time for planning, adequate microplanning and optimum implementation, monitoring and supervision, using

the appropriate readiness assessment dashboard throughout all phases of the preparation

- conducting post supplementary immunization activities coverage evaluation survey and implementing mop-up activities where needed.
- Strengthen the measles laboratory case-based surveillance system by utilizing the polio infrastructure.

### **Sudan**

Despite the significant reduction in measles cases in 2014 compared to 2013, Sudan needs to exert additional efforts to improve population immunity.

- Strengthen routine immunization with the 2 doses of the MCV, through proper implementation of the RED approach, monitoring the Penta1-MCV1 and MCV1-MCV2 dropout rate and implementing appropriate measures to minimize the dropout rate, including raising population awareness and tracing defaulters.
- Ensure timely implementation of high quality follow-up supplementary immunization activities.
- Further strengthen measles surveillance, expand it to cover all health facilities and engage the private sector.

### **Syrian Arab Republic**

- Intensify efforts for strengthening routine immunization and rebuilding the EPI infrastructure.
- Ensure regular availability of measles-containing vaccine and expedite registration of available WHO prequalified vaccines.
- Implement high quality follow-up measles supplementary immunization activities at short intervals to bridge the gap resulting from low routine vaccination coverage.

### **Tunisia**

- Ensure proper case/outbreak investigation to identify any gap in population immunity to consolidate the progress towards interruption of endemic virus transmission.
- Conduct advocacy for involvement of the private sector in measles case-based surveillance.

### **Yemen**

- Improve routine vaccination coverage of MCV through proper implementation of the RED approach, monitoring the Penta1-MCV1 and MCV1-MCV2 dropout rate and implementing appropriate measures to minimize drop out through raising population awareness and tracing defaulters.
- With implementation of MR supplementary immunization activities, introduce MR vaccine into routine immunization as soon as possible to avoid accumulation of susceptible populations and shifting of the age group.
- Implement follow-up supplementary immunization activities at the appropriate time based on through analysis of routine vaccination coverage and measles/rubella cases at governorate and district levels.
- Ensure availability of funds for regular procurement of MR vaccine.
- Conduct proper rubella case investigation and follow-up on the cases among pregnant women.
- Establish and strengthen CRS surveillance.



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