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Report on the

First meeting of the Technical Advisory Group on Poliomyelitis Eradication in the Republic of Yemen

Sana'a, Republic of Yemen
21–22 November 2005

World Health Organization
Regional Office for the Eastern Mediterranean
Cairo
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1. INTRODUCTION

The Technical Advisory Group on Poliomyelitis Eradication in Yemen (TAG) held its first meeting in Sana'a, Republic of Yemen on 21 and 22 November 2005. It was attended by members of the TAG and officials from the Ministry of Public Health and Population.

The meeting was opened by Dr Hussein A. Gezairy, WHO Regional Director for the Eastern Mediterranean, who praised national efforts and commitment, particularly, those of H. E. General Ali Abdullah Saleh, President of the Republic of Yemen, whose personal attention and support had been behind the success of polio eradication efforts in Yemen. He also acknowledged the exceptional efforts made by H. E. the Minister of Public Health and Population and all the Ministry staff in bringing the recent epidemic under control. The Regional Director warned against any relaxation in these efforts and emphasized the importance of addressing the main reason behind the appearance of the epidemic, namely weak routine immunization. Dr Gezairy closed by thanking the TAG members and acknowledging, with appreciation, the support of all the polio partners in the global efforts to achieve polio eradication.

In his address to the meeting, H.E. Dr Mohamed Al-Noami, Minister of Public Health and Population, welcomed the members of the TAG and thanked them for their continued support. He reiterated the commitment of the Government of Yemen to the eradication programme and to the routine immunization of all children of Yemen. He requested the views of the TAG on a number of points including future supplementary immunization activities, type of vaccine to be used and post-epidemic strategies.

Dr Yagoub Al Mazrou chaired the meeting. He welcomed the participants and pointed out that the meeting was being convened during a period of particular importance to the polio eradication programme not only in Yemen but globally.

The meeting programme and list of participants are attached as Annexes 1 and 2.

2. THE POLIOMYELITIS EPIDEMIC IN YEMEN

In 2005, Yemen suffered the largest polio epidemic in recent history with 476 cases as of 20 November 2005, representing one-third of the total global burden of polio in 2005. The epidemic, occurring 6 years after the last known case of polio in Yemen, was due to a combination of factors primarily recurrent wild poliovirus importations from the Sudan (of a virus originating in northern Nigeria) and a large population immunity gap caused by low routine immunization coverage.

The late recognition of early cases for almost 2 months was an additional factor in the widespread virus circulation. Following the detection and confirmation of the epidemic, the Ministry of Public Health and Population of Yemen conducted a model response, with recurrent, nationwide polio immunization rounds since April 2005 (for a total of 6 rounds as of mid-November) using monovalent oral poliovirus vaccines (mOPV1) in 3 rounds and trivalent OPV in the others. It is noted with great satisfaction that cases have declined rapidly and markedly and since early September have been restricted to only a few districts.

The date of onset of the last case was 17 October 2005. The present localization of the viral circulation suggests that polio transmission can be stopped completely by end 2005.

Among the lessons learned from this epidemic are the need to ensure population immunity, principally through routine immunization, and to maintain high levels of surveillance and avoid complacency. Rapidly stopping the remaining chains of poliovirus transmission now requires giving the greatest attention and support to those geographic areas and demographic groups at highest risk of sustaining poliomyelitis transmission.

3. ROUTINE IMMUNIZATION

The TAG was presented with encouraging data suggesting a recent upturn in routine immunization coverage following 3–4 years of decline. This upturn is associated with the systematic implementation of the 'penta-microplan' approach. The TAG was pleased to note national plans to strengthen routine immunization and WHO plans to further its technical support in this regard.

Recommendations

1. Health authorities should continue to give increased attention to rapidly strengthening routine immunization services in Yemen with a goal of achieving greater than 80% nationwide and province-wide coverage in 2006 and continued increase and consolidation of routine coverage in subsequent years.

2. National authorities should allocate regularly sufficient national resources to ensure accessibility of routine immunization services to increasing proportions of the population of Yemen. External resources and support should continue to be sought, particularly from GAVI, to supplement national efforts.

3. After the interruption of the ongoing polio epidemic, routine immunization should be strong enough to ensure sufficient population immunity to protect against the consequences of any future importation of poliovirus. A minimum of 4 doses of OPV before the age of one year should be ensured.

4. A specific social mobilization plan of action should be developed and implemented as part of a broader programme of work to rapidly enhance routine immunization coverage. The opportunity of polio social mobilization activities should continue to be used to enhance community engagement in the routine programme.

5. Trivalent OPV (tOPV) should continue to be used for all routine immunization activities.

4. SUPPLEMENTARY IMMUNIZATION ACTIVITIES

The TAG was impressed with the steady improvement in the quality of polio campaigns since May 2005. Particularly impressive was the capacity of the programme to introduce so many innovations rapidly, including the house-to-house approach, finger marking, house marking, etc. Independent monitoring data suggest that at least 90% of children, and usually more than 95%, are being reached during each campaign, including children aged less than 1 year. Of note, areas with coverage of around 90% appear to be associated with ongoing poliovirus transmission. The TAG was also very impressed with the quality and depth of the public communication/social mobilization activities that have underpinned these campaigns.

The primary goal of the polio campaigns at this point in the Yemen eradication programme must be to give special attention to the highest risk areas and groups to ensure that the final chains of poliovirus transmission are interrupted by the end of 2005.

Recommendations

1. Nationwide polio campaigns should be continued until at least two full campaigns have been conducted after the last wild poliovirus is detected. Based on current progress, it is the expectation of the TAG that two additional NIDs, one in December 2005 and the other in early 2006, may be sufficient to stop transmission. The appropriate duration between these campaigns would be 4 weeks. During the final meeting with the Ministry of Public Health and Polpulation, it was agreed that the December round would be from 18 to 20 December 2005.

2. The priority during these campaigns should be to give the greatest attention and support to the geographic areas (e.g. Dhamar and Sana'a governorates) and demographic groups which appear to be sustaining the final chains of transmission.

3. Monitoring should particularly be targeted at these high risk areas, and immediately fed back to the relevant governorate, district or local authorities to ensure immediate corrective actions in any areas achieving less than 95% coverage. As well, the results of independent monitoring should be relayed to districts and local authorities to be used in strengthening their planning for any future campaigns.

4. mOPV1 should continue to be used for all polio campaigns until wild poliovirus transmission is interrupted[1].

5. The national programme should ensure that the national guidelines for managing poliovirus importations are updated to reflect the new 2005 *Standing Recommendations for Circulating Polioviruses* of the global Advisory Committee on Polio Eradication.

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[1] The TAG notes that historically the risk of type 1 wild poliovirus importations is markedly higher than that of type 3 wild polioviruses.

6. The TAG noted, with great appreciation, the excellent comprehensive national plan for social mobilization implemented before and during the campaign days. The TAG also noted with satisfaction efforts made to further strengthen the polio social mobilization activities to address the evolving challenges with each campaign.

5. SURVEILLANCE FOR ACUTE FLACCID PARALYSIS

The TAG noted the improvements in the quality of AFP surveillance in Yemen during 2005. The national non-polio AFP rate is now more than 2 per 100 000 population under 15 years, with 18 of 22 governorates achieving this level. Nationally, the adequate specimen collection rate is above 80%, with 14 of 22 governorates achieving this performance target.

The primary goal of AFP surveillance at this point in the Yemen eradication programme must be to markedly enhance the speed of investigation, collection and transportation of specimens for laboratory examination and use of the results to guide the December 2005 and future polio campaigns and direct further operations of the programme.

Recommendations

1. The highest priority for AFP surveillance must be to achieve and maintain an AFP rate of > 2 per 100 000 population in all the individual governorates, and particularly in the remaining 4 governorates that have not achieved this level.

2. The second highest priority of the AFP surveillance system must be to ensure the most rapid possible investigation, shipment of specimens and final laboratory results of AFP cases to guide future campaigns. Particular attention should be given to ensuring that all 'hot cases' are prioritized for specimen transport and processing.

3. The TAG concurs with the Ministry's plan to address highly suspect 'hot' cases with a rapid detailed epidemiologic investigation of the area and, if appropriate, an immediate local immunization response with mOPV1. This area must also be recovered during the large-scale mop-up that would be required if the highly suspected case is subsequently confirmed as polio.

4. The TAG endorses the recommendations of the recent AFP surveillance review and requests a further update on implementation of its recommendations at the next TAG meeting.

5. Surveillance focal points nationwide should be re-oriented on the strategy of active surveillance to ensure that this concept is properly understood and implemented. Appropriate tools for listing and tracking active surveillance sites should be developed and disseminated. They should be trained on neurological examination.

6. Health workers, particularly physicians, should be re-oriented to the importance of AFP reporting. Particular attention should be given to private practitioners in Sana'a and other large cities.

7. The formal guidelines for classifying AFP cases should be shared with the National Expert Group. As well, an orientation meeting should be arranged by WHO on this subject in early 2006.

8. A monthly feedback mechanism with surveillance data should rapidly be established to provide all governorates, eventually all districts with key data on their performance and outcomes relative to other governorates and districts.

6. CARE FOR POLIOMYELITIS PATIENTS

The TAG was informed of the national plan to provide the necessary care to patients with poliomyelitis paralysis, and calls on national, international organizations, agencies and societies working in this field to extend support to the Ministry of Public Health and Population efforts in this regard.

7. ACKNOWLEDGEMENTS

The TAG would like to acknowledge the excellent work of the Ministry of Public Health and Population of Yemen, which facilitated the deliberations of the meeting. The TAG noted with satisfaction the strong and continued inputs of various partners in polio eradication activities in Yemen, particularly, WHO, UNICEF, USAID, ECHO, DFID and the Gates Foundation.

Annex 1

PROGRAMME

Monday 21 November 2005

08:30–09:00	Registration
09:00–09:30	Opening session Address by Dr Hussein A. Gezairy, WHO Regional Director for the Eastern Mediterranean Address by H.E. Dr Mohamed Al-Noami, Minister of Public Health and Population Objectives and meeting agenda
09:30–10:00	Summary of the outbreak and response, current situation/ Dr M. H. Wahdan, WHO/EMRO
10:00–10:45	Discussion
10:45–11:15	AFP surveillance structure and performance/ Ministry of Public Health and Population
11:15–11:45	AFP surveillance reviews and response to recommendations/ Ministry of Public Health and Population
11:45–12:00	Discussion
12:00–12:30	Population immunity: routine and supplementary immunization history/NP-AFP profile/ Dr Hala Safwat, WHO/EMRO
12:30–14:00	Planning and implementation of 2005 NIDs/ Ministry of Public Health and Population
14:00–14:30	Evaluation of NIDs (independent monitors and international observers)/ Dr A. Khedr, WHO/STC
14:30–14:45	Discussion
14:45–15:15	Social mobilization
15:15–15:30	Future plans and questions to the TAG/ Ministry of Public Health and Population
15:30–16:15	Discussion
16:15–17:00	Closed Meeting of the TAG Members

Tuesday 22 November 2005

09:30–11:00	Closed Meeting of the TAG Members
11:00–12:00	Presentation of the Report and debriefing with H.E. the Ministry of Public Health and Population/ Chairman of the TAG
12:00–12:30	Closing session

Annex 2

LIST OF PARTICIPANTS

Members of the Technical Advisory Group

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Other organizations

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