

Summary report on the

**Subregional meeting  
on scaling up acute  
watery diarrhoea/cholera  
preparedness and response**

WHO-EM/CSR/143/E

Beirut, Lebanon  
8–9 July 2017



**World Health  
Organization**

Regional Office for the Eastern Mediterranean

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## **1. Introduction**

Cholera and acute watery diarrhoea are commonly reported epidemic-prone diseases in the Eastern Mediterranean Region, with Afghanistan, Iraq, Pakistan, Somalia, Sudan and Yemen being the most vulnerable countries. In 2017, Somalia and Yemen recorded one of the worst cholera epidemics on record. In Yemen, the outbreak began in 2016 and spread to over 75% of the country, and despite a large number of suspected cases being reported, it is assumed that the outbreak has not yet peaked. In Somalia, the cholera outbreak spread to 16 of the 18 regions in the country. In Sudan, cases of acute watery diarrhoea were reported in 15 out of 18 states between August 2016 and July 2017, and it is estimated that an additional 10 000 cases will occur by the end of 2017 if the outbreak is not contained.

In view of the ongoing cholera and acute watery diarrhoea outbreaks in Somalia, Sudan and Yemen and the risk of spillover to neighbouring countries due to porous borders and the frequent movement of populations across them fleeing areas affected by conflict, an emergency meeting was organized by the WHO Regional Office for the Eastern Mediterranean, in collaboration with UNICEF in Beirut, Lebanon from 8 to 9 July 2017. A total of 51 participants from the ministries of health of Egypt, Jordan, Lebanon, Oman, Saudi Arabia and Sudan, as well as participants from WHO, UNICEF, the Eastern Mediterranean Public Health Network, and the International Federation of Red Cross and Red Crescent Societies – Middle East and North Africa attended the meeting.

The meeting was inaugurated by Dr Mahmoud Fikri, WHO Regional Director for the Eastern Mediterranean.

The objectives of the meeting were to:

- review the current situation regarding cholera and acute watery diarrhoea in the Region, and challenges for ongoing response operations to manage outbreaks in Somalia, Sudan and Yemen; agree on a mechanism for rapid information-sharing between affected countries, neighbouring non-affected countries and partners in order to minimize geographic spread;
- address the concerns of countries relating to the potential threat of cholera spreading beyond currently affected countries and the interventions required in this regard; and
- provide other non-affected countries with recommendations to enhance their preparedness and readiness measures for early detection of and rapid response to any potential importation of cholera/acute watery diarrhoea, including measures to detect cross-border spread as required under the International Health Regulations (IHR 2005).

## **2. Summary of discussions**

### *Key challenges for effective response*

The occurrence and severity of cholera outbreaks are greatly aggravated by deteriorating water, sanitation and hygiene conditions, compounded by poor living conditions and increased population movement.

Participants identified a number of challenges that impede an effective response to cholera and acute watery diarrhoea outbreaks, especially in endemic countries. These include weak or collapsed health systems as a result of protracted conflict or crisis; insecurity and lack of access to affected areas, which hinder the timely movement of rapid response teams and international partners; food insecurity and malnutrition in the

context of drought resulting in low immunity levels in vulnerable populations; disrupted social services, and population movement; weak and fragmented response capacities in affected countries; limited laboratory capacity to detect and confirm cases; and weak coordination and leadership in health sectors for effective outbreak response. In Yemen, this situation is further compounded by the non-payment of salaries of health care workers and other civil servants, and fragmented government structures also impede an effective response in the country.

In addition, some countries lack comprehensive and integrated cholera preparedness and response plans to prevent cholera outbreaks from occurring, and to respond effectively when they have occurred. A clear regional roadmap or common vision is required, as well as technically sound and well-resourced operational plans (including “grab and use” tools such as standard operating procedures and related WHO guidelines) that would allow partners to work in an integrated manner and use field evidence to drive their response.

### *Coordination mechanisms*

Multisectoral coordination for cholera/acute watery diarrhoea outbreak response remain another mounting challenge. Coordination mechanisms need to be action-oriented rather than used only for information sharing, and better documentation of meeting action points is required. Famine and drought coordination and operations centres have proven to be successful in Somalia. The model of the Cholera Command and Control Centre (C4) established for the cholera outbreak in Zimbabwe was successfully piloted by the WHO Regional Office in Iraq in 2015, and can be replicated in Somalia, Sudan and Yemen.

Currently in Yemen, coordination mechanisms are active in hubs at governorate level in some of the worst affected governorates, but these

coordination mechanisms are not functioning at acceptable levels. There are plans to expand such coordination structures to governorate level in all governorates, but no plans are in place yet for district level interventions. There are also no implementing partners in almost half of the affected districts in Yemen, although from experience in previous outbreaks, it has been proven that districts are the best entry point for a successful response.

### *Risk assessment and grading of the event*

According to WHO's emergency response framework, a risk assessment and grading of cholera/acute watery diarrhoea outbreak events, and the establishment of an incident management system are required in all affected countries; however, these actions have not been taken in Yemen. This has resulted in limited linkages between response operations and epidemiological data.

### *Management of diarrhoea treatment centres and oral rehydration points*

The proportion of laboratory-confirmed cases in Yemen and Somalia is very low due to weak laboratory diagnostic capacities. High rates of malnutrition in some affected governorates of Yemen are complicating case management and increasing disease severity and mortality. It is critical that the quality of services be maintained at treatment centres, especially in the areas of infection prevention and control, through the use of clear guidelines. In Yemen, there was a pressing need to establish many treatment centres quickly at the beginning of the outbreak, so monitoring is required to ensure service quality. The different types of health services provided at the diarrhoea treatment centres and oral rehydration points need to be clarified and shared with health workers.



*Use of oral cholera vaccines*

Based on recent experiences and evidence regarding the effectiveness of oral cholera vaccines, WHO recommends that the vaccine be considered for use in hotspot areas in endemic countries, or in humanitarian crisis situations to substantially control the risk of outbreaks. Reactive vaccination campaigns are recommended in areas where outbreaks are active with the aim of protecting the individuals who receive the vaccines, limit deaths and reduce the spread of the disease. However, oral cholera vaccines do not replace the traditional preventive or other public health control interventions such as improving water, sanitation and hygiene conditions, case management, and surveillance. The use of oral cholera vaccines should therefore only be considered in conjunction with classic control measures, including mid- to long-term water, sanitation and hygiene measures and control plans.

Considering the current state of the outbreak in Yemen, the introduction of oral vaccines should be considered for districts recently affected by the outbreak with a small number of cases, or those that are highly susceptible to cholera. The public health benefits of the use of the oral vaccine in districts encompassing extensive geographical areas would be minimal, as the impact of these vaccines when community transmission is pervasive is negligible.

Depending on the objectives for its use and the timing of this use, the first dose of oral cholera vaccine can limit mortality, reduce the geographic spread of disease and confer immunity to future outbreak. Considering the context of Yemen, it has been agreed to consider a two-dose approach. If the global stock of oral vaccine is not adequate, there can be a delayed second dose within two months or more. In Sudan, a campaign was conducted in camps hosting South Sudanese refugees in White Nile state. Cases of acute watery diarrhoea only appeared

recently in these camps following the influx of refugees. A new oral cholera vaccine campaign was also conducted in recent weeks targeting internally displaced persons camps in Darfur.

*Water, sanitation and hygiene interventions and community engagement efforts*

The most critical and proven interventions in cholera prevention and control are improved environmental health services, including provision of adequate sanitation and safe drinking-water, and promoting hygiene practices at household and community levels. Services are also needed to sustain the cholera-free status of areas once outbreaks are over. Both water, sanitation and hygiene and health services at community level in Yemen are being scaled up through the deployment of rapid response teams, although these teams are active in only 80 of the 333 districts in the country. There are plans to expand these teams to every district, although there are constraints in identifying ways to scale up action in a context in which the salaries of health-care workers are not being paid. Sanitation is a major challenge, and the response in Yemen is still lacking a number of water, sanitation and hygiene interventions.

A review of water, sanitation and hygiene (WASH) and health clusters is needed to prevent clusters working in silos, and to identify areas where they can work in a more integrated manner. In hotspots where one cluster may have a weak or limited presence, gaps should be filled by looking at actual needs and available resources on the ground, rather than mandates, and working closely for a coordinated response.

In both areas of water, sanitation and hygiene and risk communication and community engagement, there is an urgent need to scale up activities at district and household level. Current behaviour change communication for both health workers and communities is limited, and

not customized to the epidemiology of the disease or our current knowledge of transmission risk factors.

Lessons learnt from polio eradication efforts in Pakistan show that paying health workers and deploying them at community level is a key factor in achieving polio eradication. The cholera outbreak in Sudan in 2008 was contained mainly through the allocation of resources for community level engagement, highlighting the need to keep the public informed, alert and educated, and recognizing the role of the media in risk communication. One of the key challenges is addressing rumours among communities, as well as correcting the behaviour of health workers on how to provide proper treatment (that is, the correct number of antibiotic doses).

In light of weak health systems, the use of community health volunteers for risk communication, case identification and reporting could be important. Regular assessments of risk communication campaigns need to take place to monitor their impact so that they can be revised as needed. With regard to media communications, it is the role of governments to keep the public informed of the evolving situation, and therefore spokespersons need to be identified at ministry of health level to ensure transparency in communication. Joint press conferences and joint press releases from the United Nations would also help ensure consistency in the data being shared.

#### *International Health Regulations (IHR 2005)*

Although outbreaks of cholera/acute watery diarrhoea are not mandatorily notifiable according to the IHR, for the sake of openness and transparency, it is important that countries share information on events in a timely manner with WHO. It is also essential that all endemic countries have the core capacities required by the IHR for the early detection of cholera cases to ensure rapid response and containment. Because most people travelling by

road are at high risk of transmitting cholera, there is a need to strengthen capacities relating to detection at ground crossings. No specific measures are recommended at ground crossings, but each country needs to work with WHO to implement specific measures that do not interfere with the movement of people and goods. Proper risk communication is critical, as well as preparedness, simulation exercises, and contingency planning.

Lessons learnt from the 2010 cholera outbreak in Haiti show that disease can be transmitted by a person even if they are not sick, so screening at borders is not very effective. Also, as yet there is no evidence to suggest that vaccinating someone will stop them from being a carrier. Additionally, the vast majority of transmissions take place through person-to-person contact, not through contact with contaminated food, so placing an embargo on food may also not be enough to stop the importation of a disease. Early detection through enhanced surveillance therefore remains key in outbreak prevention and control. For countries that are unwilling to announce an outbreak, a risk assessment is required, following which the WHO Director-General may decide whether or not to publically announce the occurrence of an outbreak in a country even though that country may deny the presence of an outbreak, provided that WHO has credible information on the source and cause of the outbreak.

### **3. Next steps**

Participants agreed on an action plan for countries and WHO/concerned partners which includes all activities/actions required (with timelines and assigned focal points) to ensure that a more effective response is mounted by the health and WASH sectors in all affected countries and those countries bordering them to prevent further geographic spread of cholera/acute watery diarrhoea in the Region. The action plan also includes a section on scaling up measures to ensure that the requirements of the IHR are met.



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