Highlights

- A cholera outbreak has reignited in Yemen, spreading with unprecedented speed across 18 out of 23 governorates and causing a total of 23,425 suspected cases and 242 deaths between 27 April 2017 and 18 May 2017.
- This is the second wave of an outbreak which first emerged in September 2016 and had previously shown signs of slowing. The cumulative total number of cases reported across both waves of the outbreak has reached 49,096 with 361 related deaths.
- The current rate of spread is alarming, with 44% of the total cases reported over the last 7.5 months and 65% of the total deaths reported in May 2017 alone.
The World Health Organization (WHO) has supported health authorities in revising the overall response strategy, summarized in the points below:

a. Provision of health services free of charge to remove financial barriers to the treatment of cases of suspected cholera;

b. Enhancement of emergency operation centres at the national and governorate levels, including full adoption of the incident command system and improvements to the timeliness and quality of data management;

c. The timely use of surveillance information to identify priority areas for health and WASH interventions;

d. Support to Rapid Response Teams (RRTs) at the governorate level, and the establishment of RRTs at the district level;

e. The scale up of health education and health promotion activities for diarrhoea prevention;

f. Substantial increase in the number of Oral Rehydration Corners (ORC), with referral of severe cases to Diarrhoea Treatment Centres (DTC);

g. The improvement of triage in both DTCs and ORCs to enhance the use of oral rehydration therapy, limit the use of intravenous fluids to cases with severe dehydration, and reduce congestion in the DTCs;

h. On-the-job training for health workers on the classification of dehydration, and protocols for the use of oral rehydration salts and intravenous (IV) therapies, in order to reduce the case fatality rate and the mismanagement of IV fluids;

i. The targeting of districts with the highest attack rates and cholera case numbers with technical and operational support and fast direct provision of resources for local scaling up of the response.
Situation

- Since 28 September 2016, 49 096 suspected cholera cases and 361 related deaths have been reported.
- A resurgence of the outbreak has seen a total of 23 425 suspected cholera cases and 242 deaths reported in 18 governorates since 27 April.
- The current rate of spread is alarming, with 44% of the total cases over the last 7.5 months and 65% of the total deaths reported in May 2017 alone.
- While the disease is spreading rapidly in 18 governorates, Sana’a City (Amant Al-Asimah) is particularly affected, with more than 7 000 suspected cholera cases. This represents nearly one-third of all cases in the last 20 days.
- The number of deaths recorded over the last three weeks is almost two times higher than deaths reported from October 2016 to March 2017.
- A total of 301 stool samples tested positive for Vibrio Cholera, serotype Ougawa.
- The upsurge in cases comes as the health system and civil infrastructure, including water and sanitation facilities in most Yemeni governorates have been seriously affected due to the ongoing conflict. Recent heavy rains contributed in the contamination of water sources. In addition, warmer weather is creating a favorable environment for the pathogens that cause diarrheal disease to spread.

AWD suspected cholera cases by governorate in Yemen, 27 April - 18 May 2017
<table>
<thead>
<tr>
<th>No</th>
<th>Governorate</th>
<th>Suspected AWD/Cholera cases</th>
<th>Confirmed cases (by culture test)</th>
<th>Deaths</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Sana’a city</td>
<td>7014</td>
<td>137</td>
<td>31</td>
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<tr>
<td>2</td>
<td>Hajjah</td>
<td>2753</td>
<td>9</td>
<td>36</td>
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<td>2596</td>
<td>37</td>
<td>33</td>
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<tr>
<td>4</td>
<td>Amran</td>
<td>2360</td>
<td>14</td>
<td>27</td>
</tr>
<tr>
<td>5</td>
<td>Al-Mahweet</td>
<td>1560</td>
<td>5</td>
<td>27</td>
</tr>
<tr>
<td>6</td>
<td>Taiz</td>
<td>1152</td>
<td>36</td>
<td>14</td>
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<td>7</td>
<td>Al-Bayda</td>
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<td>2</td>
</tr>
<tr>
<td>8</td>
<td>Dhamar</td>
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<td>19</td>
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<tr>
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<td>Aden</td>
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<td>17</td>
<td>Sa’ada</td>
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<tr>
<td>18</td>
<td>Marib</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>23,425</strong></td>
<td><strong>301</strong></td>
<td><strong>242</strong></td>
</tr>
</tbody>
</table>

**WHO response**

- WHO supported the enhancement and full activation of the Emergency Operations Centre (EOC) in Sana’a, including the establishment of an incident command system.

- EOCs are also being supported at the governorate level, including through the provision of information technology equipment for the real-time collection, analysis and dissemination of vital data on the spread of the disease.

- Surveillance data has been consolidated into one singular national line list managed by the national EOC, greatly contributing to the improvement of data analysis. This in turn allows for identification of high risk areas, allowing health and WASH responders to better prioritize interventions.
Four diarrhoea treatment centres and 16 oral rehydration therapy corners have been established by health authorities and WHO over the last 10 days in Sana’a and Amanat Al-Asima Governorates.

WHO has distributed more than 64,700 bottles of intravenous (IV) fluids, 301 cholera beds, 14 cholera kits and five diarrhoea disease kits for health facilities in Sana’a, Amanat Al-Aismah, Al-Hudaydah and Ibb governorates.

WHO has distributed 3,200 cholera rapid tests to enhance the diagnosis of cholera cases.

Nine cholera kits and 16,000 bottles of intravenous fluids have been distributed to Hajjah, Al-Mahweet and Al-Hudayda.

300 bottles of saline solution and 200 bottles of Ringer’s lactate solution were provided to Taiz.

Ten cholera beds, 1000 packets of oral rehydration salts and 1700 bottles of various types of IV fluids have been delivered to Al-Sadaqa Hospital in Aden.

Rapid response teams have been trained and deployed to ensure timely and thorough investigation of potential cholera cases. The teams have also chlorinated wells and water sources in cholera-affected areas.

WHO has supported health authorities in disseminating all necessary guidelines and reporting tools, including standard case definitions, case management and infection control guidelines.

WHO has deployed three international epidemiologists and one communications officer to enhance WHO Country Office’s capacity to respond to the cholera outbreak.

Fifty-seven health workers from Al-Olofi, Alsakana and Althowra hospitals in Hudayda have been trained in cholera case management.

WHO conducted on-the-job training for case management for the staff at the Diarrhoea Treatment Centre in Al-Sadaqa Hospital in Aden.

As a first phase in the response, WHO is supporting health authorities in scaling up activities in the 30 most-affected districts. The first five districts reached are Bani Al Hareth, Arhab, Khamer, Dhamar City, Al Rojom, and Al Mahweet City. The other 25 most-affected district should be covered in the next 10 days. The initial trucks sent to these priority districts contain medical supplies and equipment to set up the planned DTCs and ORPs, and to support district health offices with planning, epidemiological surveillance and community mobilization.
Challenges and concerns

- Limited geographical access to health facilities, especially in areas witnessing ongoing violence or where health facilities are no longer functioning. More than 55% of all facilities have closed or are only partially functional, and there are no longer any doctors present in 49 out of 276 districts. Health workers have not been paid for eight months due to the ongoing financial crisis.

- Logistic and operational difficulties to the rapid delivery of medicines and medical supplies to affected areas.

- Limited operational capacities of scaling up operations against cholera of local health authorities and national and international health partner.

- The rainy season and accumulation of waste on the streets in urban areas may contribute to a significantly increase of cases.

Contact information

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