Since the start of the second wave of cholera outbreak on 27 April 2017, a cumulative total of 91,431 suspected cholera cases, including 727 associated deaths, have been reported across the country from 267 districts in 19 out of the 23 governorates, with a case-fatality rate of 0.8%.

Of the total reported cases, 48,708 (53%) are women, while 16,048 (18%) are children below the age of five.

More than half of the suspected cholera cases have been reported from four governorates: Amanat Al Asimah, Hajjah, Amran and Al Hudeideh.

A total of 391 stool samples from 19 governorates tested positive for Vibrio Cholerae, serotype Ougawa.

The overall attack rate is 32.7 per 10,000 of population.

In partnership with the Ministry of Health, WHO is co-chairing a cholera task force that brings together UNICEF, OCHA and other partner organizations twice a week to strengthen cholera response activities at the national and governorate levels.
Figure 1: Map showing the attack rates of suspected cholera cases by district, 27 April-5 June 2017.
Situation update

A total of 24,027 suspected cholera cases including 152 associated deaths have been reported during the period 30 May to 5 June 2017 compared to 25,555 cases and 137 deaths that were reported during the period 23 – 29 May 2017.

The daily average number of cases was 3,432 cases per day indicating slight decrease in comparison to the previous seven-day period (3,651 cases per day).

Figure 2: Epi curve of the suspected cholera cases by date of onset, Yemen, 27 April-5 June 2017

Age distribution

Some 26% of the suspected cholera cases have been reported among 15- to 29-year-olds, making them the most affected age group, followed by children of five to 14 years of age (accounting for 22% of cases).

Almost one third of the associated deaths (31.4%) have been reported among the elderly (> 60). The 5-14 and 45-60 age groups each account for 16% of all deaths.

Figure 3: Percentage of suspected cholera and associated deaths by age group, 27 April –5 June 2017
Geographical Distribution

More than half of the suspected cholera cases (52%) have been reported from four governorates: Amanat Al Asimah (19%, 17,015), Hajjah (11%, 10,444), Amran (11%, 10,074) and Al Hudaydah (11%, 9,760).

Half of cases (44,347) (49%) have been reported from 30 districts. The most affected districts are Al Hali (in Al Hudaydah governorate), Bani Al Harith (Amanat Alasema), Ma’ain and As sabeen (both in Amanat Al Asimah). The majority of the top affected districts (28 districts) are from northern governorates.

Table 1: Summary table indicating the numbers of suspected cholera cases and associated deaths, attack rates (per 10 000) and case fatality rates (CFR %)

<table>
<thead>
<tr>
<th>Governorate</th>
<th>Cases</th>
<th>Population</th>
<th>Attack Rate</th>
<th>Deaths</th>
<th>CFR</th>
</tr>
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<tbody>
<tr>
<td>Amanat Al Asimah</td>
<td>17015</td>
<td>3469122</td>
<td>49.0</td>
<td>37</td>
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<tr>
<td>Hajjah</td>
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<td>Amran</td>
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<td>1426244</td>
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<td>Al-Hudaydah</td>
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<td>3283916</td>
<td>29.7</td>
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</tr>
<tr>
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<tr>
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<td>1.2</td>
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<td>91431</td>
<td>27,942,788</td>
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<td>727</td>
<td>0.8</td>
</tr>
</tbody>
</table>

Attack rates and case fatality rate (CFR %)

Amanat Al Asimah reported the highest number of suspected cholera cases (17,015 cases) followed by Hajjah governorate (10,444 cases) and Amran (10,074 cases). However, Al-Mahweet governorate accounted for the highest attack rate (79.9 per 10 000), followed by Sana’a governorate (70.8 per 10 000), Amran (70.6 per 10 000) and Al-Bayda (52.3 per 10 000)

The national attack rate was 8.6 per 10 000 during the period from 30 May-5 June compared to 9.1 per 10 000 during the period 23-29 May 2017.
At the district level, Zulaymat Habur in Amran governorate accounted for the highest attack rate (262.2 per 10,000) followed by Ash Sharyah in Al-Bayda (248 per 10,000), Sharas in Hajjah (240 per 10,000), Mudiyah from Abyan (210.8 per 10,000) and Mukayras in Al-Bayda (207.2 per 10,000).

Figure 4: Number of cholera cases & attack rates (per 10,000 of population), 27 April-5 June 2017

The national case fatality rate (CFR) was 0.5% during the period 23–29 May 2017 compared to 0.6% during the period 30 May–5 June 2017, indicating increase in the CFR (%) during the last period.

Ibb governorate reported the highest case fatality rate (2.1%), followed by Raymeh (1.5%) and Dhamar (1.2%).

Figure 5: Number of suspect cholera cases & CFR (%), Yemen, 27 Apr-5 June 2017
Response activities

- **Coordination**
  
  In partnership with the Ministry of Health, WHO is co-chairing a cholera task force that brings together UNICEF, OCHA and other partner organizations twice a week to strengthen cholera response activities at the national and governorate levels.

- **Surveillance and laboratory**
  
  - WHO supported training for district-level rapid response teams in Sana’a City and Dhamar governorates and deployed them to ensure timely and thorough investigation of potential cholera cases. WHO is also supporting rapid response teams at the governorate level.
  - More than 4000 rapid diagnostics tests have been distributed to the affected governorates to enhance the early detection of disease. Stool sample collection and transport has been supported.

- **Case management and infection control**
  
  - WHO supported the establishment of 13 new diarrhea treatment centers (DTCs) and 27 oral rehydration therapy corners. The oral rehydration therapy corners have been designed to treat mild or moderate cases of diarrhoea and dehydration in Amanat Al Asimah, Sana’a, Amran, Dhamar, Al Mahweet and other affected governorates.
  - As part of the “30 trucks project”, WHO trained and deployed 20 field coordinators to the 30 top priority districts to identify needs and conduct micro-planning.
  - On-the-job training has been provided to health workers on case management and infection control practices in the diarrhoea treatment centres of Amanat Al Asimah, Aden and Abyan.

- **Water, sanitation and hygiene (WASH)**
  
  - WHO participates in WASH activities through the chlorination of 106 wells in Al Sa-been district in Amanat Al Asimah and water trucking to three diarrhea treatment centres (22 May hospital, Abn Hayan and Ali Abdul Mughne health centers in Amanat Al Asimah). Water purification tablets were also provided to the functional diarrhoea treatment centres and oral rehydration therapy points.
  - Within 24 hours of hearing of the impending need, WHO provided the funding necessary to fuel the generator for the sewage treatment station in Al Rawdha in Amanat Al Asimah.
- Logistics
  - Since 27 April, WHO provided more than 197,000 bags of intravenous fluids, 410 beds with cleaning supplies, 62 cholera kits (drugs module) and another 17 supplementary cholera kits (renewable supply, equipment, logistics and stationary modules) to the health facilities in Amanat Al-Asimah, Al-Mahweet, Amran, Ibb, Al-Hudaydah, Hajjah, Raymah, Al Jawaf, Sada’a, Abyan, Aden and Dhamar.
  - A WHO chartered aircraft carrying intravenous fluids and cholera kits has successfully landed at Sana’a airport in Yemen. At 67 tons, it constitutes the largest planeload of medical goods WHO has brought into the country since the escalation of the conflict in March 2015. This is part of a larger shipment which includes 13 tons of supplies for Aden.

Urgent needs
- Continuation of active case search and early warning surveillance in high risk districts.
- Targeted WASH interventions in the 30 most-affected districts.
- Provision of the medical supplies necessary for the treatment and management of cholera.
- Intensification of community awareness activities, especially in the most affected areas.
- Expansion of the number diarrhoea treatment centres and oral rehydration therapy corners in the affected districts.

Contact details
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