

This official joint-report is based on information Yemen Cholera Taskforce, which is led by the Ministry of Health, WHO/Health Cluster, and UNICEF/WASH Cluster and is supported by OCHA

Highlights

- As of 24 November 2016, 103 cases of cholera have been confirmed in 31 districts with 8 cases of deaths from cholera.
- A total of 6121 of suspected cases are reported in 86 districts.
- During the week 18 to 24 November 13 new confirmed cases and 1,295 suspected cases were reported.
- Incidence rate is 3 cases per 10,000.
- Case fatality rate (CFR) for the cholera associated deaths is 1.2 %.
- WHO and partners established and supported 26 Cholera Treatment Centers in 24 districts.

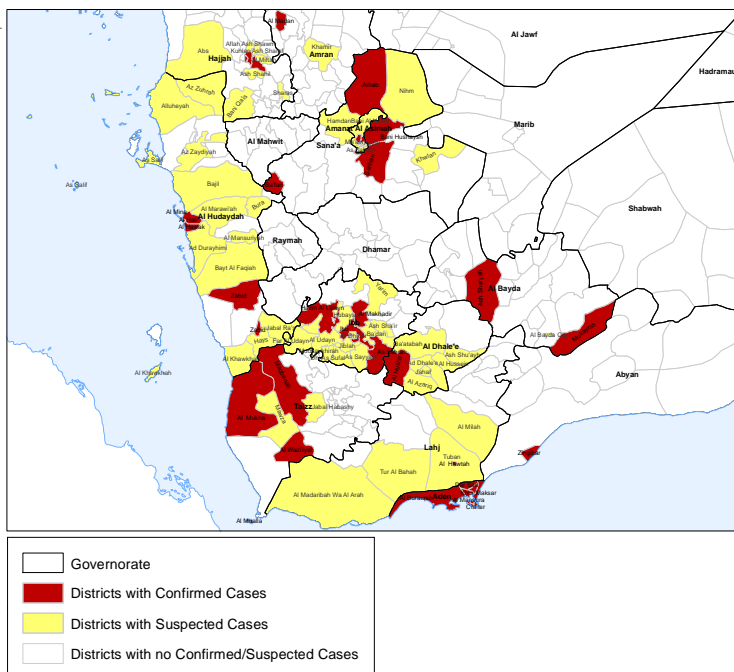


FIG 1: Cholera affected districts

The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

103

Cholera Confirmed Cases

Source: WHO/ MOPHP

6121

Suspected Cases

Source: WHO/ MOPHP

8

Confirmed Cholera Deaths

Source: WHO/ MOPHP

26

Total Diarrhea Treatment Centers

Source: WHO/ MOPHP

Situation Overview

As of 24 November 2016, a total of **103** cases have been confirmed by laboratory testing in 31 districts from 12 governorates out of the total 495 samples tested (Table 4). Additionally **6,018** suspected cases (excluding the confirmed cases) reported in **86** districts. The cases are reported from **Abyan, Aden, Al-Bayda, , Al-Dhale'e, Amanat Al Asimah, Al Hudaydah, Amran, Hajjah, Ibb, Lahj, Sana'a, and Taiz** governorates. Cumulatively, 8 cholera confirmed deaths have been reported from Aden, Hajjah, Sana'a, Ibb and Amran. A total of **76 cholera** associated deaths (including the confirmed and suspected cases) were reported as of 24 November, so the case fatality rate (CFR) for the cholera associated deaths is **1.2%**.



The rapid response team (RRT) investigating and supporting case management in Safa'an district, Sanaa' Governorate.



WHO Epidemiologists in Aden sub office investigating cholera cases reported for the first time in Zingibar district, Abyan governorate

Table1: Cumulative cholera cases and death by governorate as of 24-11-2016

Governorate	Population at risk	Confirmed	Cumulative total Cases	Cases per 10,000	cumulative cholera associated death	CFR (%)
Aden	887,148	25	1,173	13.2	3	0.3
Al Hudaydah	3,159,028	9	983	3.1	10	1.0
Taiz	2,849,692	10	1,057	3.7	17	1.6
Al Bayda	745,350	6	615	8.3	11	1.8
Al Dhale'e	714,506	4	496	7.0	0	0.0
Lahj	986,104	3	472	4.8	10	2.1
Sana'a	1,497,400	8	263	1.8	6	2.2
Hajjah	2,294,525	3	527	2.3	5	0.9
IBB	2,883,774	16	319	1.1	10	3.0
Amran	1,373,369	2	16	0.1	1	5.6
Abyan	587,825	4	4	0.1	0	0.0
Amanat Al Asimah	2,628,038	13	196	0.8	0	0.0
Total	20,606,759	103	6,121	3.02	73	1.2

Weekly Overview (18-24 November 2016)

During 18 to 24 November 2016, a total of new **1,295** suspected cholera/AWD cases were reported. Most of the reported cases (**73 %**) were from **Al-Hudaydah, Al Dhale'e, Lahj, Aden, Taiz, and AlBayda**. Additionally, **13** new cases were confirmed¹ in six districts, including 8 cases from **Zingibar** (Abyan), **Sa'fan** district (Sana'a) and **Zabid** district (Al-Hudaydah), where confirmed cases were reported for the first time. There were 6 new deaths associated with AWD during the reporting period. (See Table 2 below for details).

¹ An increase of 7 from the last reporting week (10 to 17 November), where 1,296 new suspected cases, 6 confirmed cases and 6 deaths associated with AWD were reported.

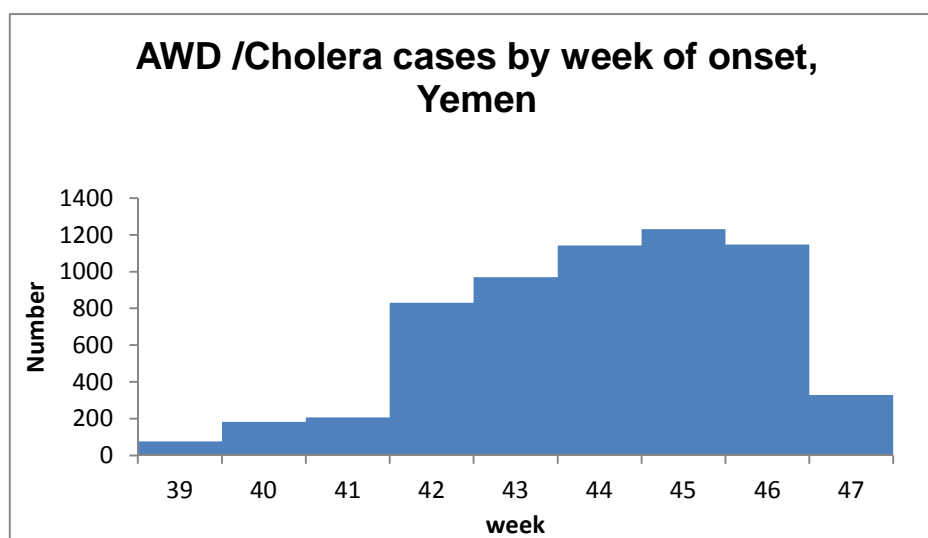
Table 2: Cholera cases and deaths by governorate in week 18-24 November 2016

Governorate	Population at risk	New Confirmed Cases	New Suspected	Cases per 10,000	Number of deaths
<i>Aden</i>	887,148	3	145	1.6	1
<i>Al Hudaydah</i>	3,159,028	2	266	0.8	2
<i>Taiz</i>	2,849,692	0	126	0.4	0
<i>Al Bayda</i>	745,350	0	94	1.3	0
<i>Al Dhale'e</i>	714,506	0	235	3.3	1
<i>Lahj</i>	986,104	0	86	0.9	0
<i>Sana'a</i>	1,497,400	1	86	0.6	2
<i>Hajjah</i>	2,294,525	0	70	0.3	0
<i>IBB</i>	2,883,774	2	141	0.5	0
<i>Amran</i>	1373,369	1	11	0.1	0
<i>Abyan</i>	587,825	4	4	0.1	0
<i>Amanat Al Asimah</i>	2,628,038	0	31	0.1	0
Total		13	1,295	0.6	6

Epidemiological Trends

Cumulatively, **103** confirmed cholera cases including 8 deaths have been reported in Yemen, involving **12** governorates since the first case was confirmed on 6 October 2016 in Amanat Al Asimah (Figure 3.1).

Figure 2: Epidemiological curve for suspected cholera/AWD cases in Yemen, as of week 47, 2016

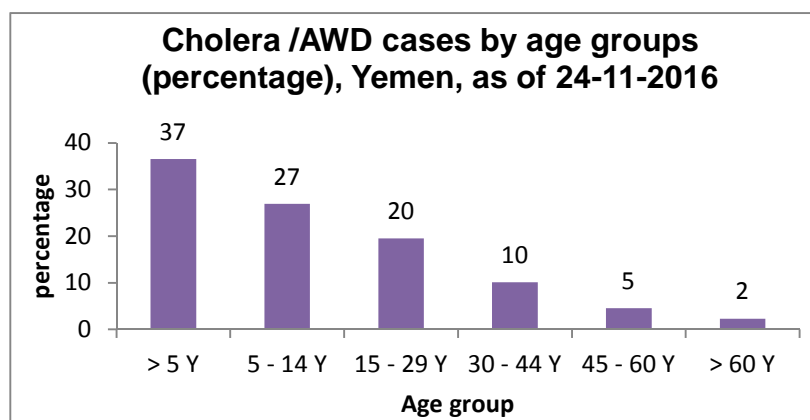


The acute watery diarrhea and cholera outbreak started in week 39 initially reported from Shu'aub district in Sana'a city. Since then, the number of cases escalated significantly from the week 42. The actual number of the cases in the last week 47 will be appeared in the next reporting.

Table3: the distribution of the cases by the age group and gender, Yemen, as of 24-11-2016

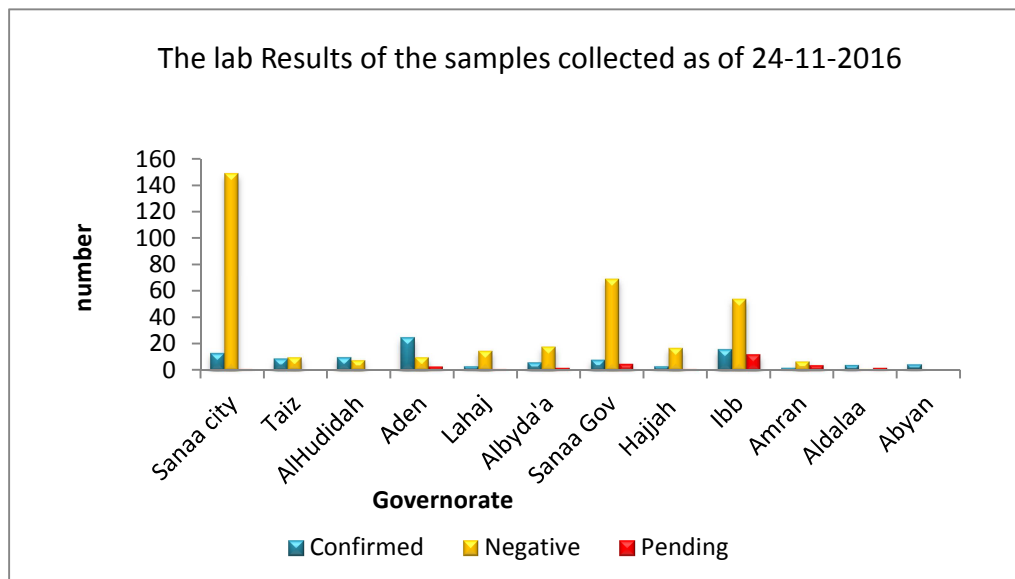
GOV	Age Groups											
	> 5 Y		5 - 14 Y		15 - 29 Y		30 - 44 Y		45 - 60 Y		> 60 Y	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Aden	156	116	162	154	137	197	72	63	32	38	21	20
Albyda'a	94	110	95	90	46	44	35	18	7	11	11	7
Aldala'a	135	106	72	57	29	35	26	15	8	7	10	2
Alhudaida	183	159	121	111	76	117	49	63	30	26	23	18
Amran	5	1	2	0	0	2	3	1	0	0	1	1
Hajjah	112	118	88	78	30	48	16	27	2	9	2	4
ibb	48	94	36	54	14	43	7	18	4	9	3	3
Lahaj	117	74	54	65	38	51	18	24	15	17	5	3
Sana'a City	36	37	30	22	9	10	5	10	6	6	0	1
Sana'a Gov	85	51	35	16	21	19	12	8	5	7	2	2
Taiz	219	173	162	138	94	132	62	64	19	21	1	1
Total	1190	1039	857	785	494	698	305	311	128	151	79	62

Out of the cumulative suspected cholera cases since the beginning of the outbreak, about 63 % are children below 15 year (Figure 3).

Figure 3: distribution of cholera and AWD cases by percentage of age group**Table 4: Cholera Laboratory Test Results for Yemen, as of 24 November 2016.**

Lab Result					
No.	Governorate	Confirmed Cholera	Negative	Pending	Total Collected
1	Amanat Al Asimah	13	149	1	163
2	Taiz	9	10	0	19
3	Al Hudaydah	10	8	0	20
4	Aden	25	10	3	38
5	Lahj	3	15	1	19
6	Al Bayda	6	18	2	26
7	Sana'a	8	69	5	83
8	Hajjah	3	17	1	21
9	Ibb	16	54	12	82
10	Amran	2	7	4	13
11	Aldala'a	4	1	2	7
12	Abyan	4			4
Total		103	358	31	495

Figure 4: the lab results of the acute watery diarrhea cases, as of 24-11-2016



Contaminated Water is the possible source of infection. In Al Bayda'a five water samples tested positive for cholera, as well as water sources from three districts in Ibb Governorate. However, all samples taken from water, vegetables and grapes in Sana'a were negative for cholera. In addition, there is a notable decline of AWD in the areas where the water sources were chlorinated

Humanitarian Response from 10-17 November 2016

The national Cholera Taskforce is responsible for the overall coordination of the cholera response at the national level. This Taskforce is led by the MoPHP, UNICEF/WASH Cluster and WHO/Health Cluster and is supported by OCHA.

Health Response

- WHO is supporting two national health emergency control rooms in Aden and Sana'a to ensure data collection quality from affected governorates, and to coordinate the response, issue twice a week situation updates and mobilize rapid response teams.
- WHO is supporting the rapid response teams (RRT) in the priority governorates and hot districts, to ensure timely and effective epidemiological investigation and response.
- WHO is supporting the functionality of 26 Diarrhea Treatment centers (DTCs) and ensuring effective case management according to technical WHO guidelines.
- WHO has trained 40 physicians on case management and infection control prevention in Sana governorate.
- WHO has trained 49 and 80 Health workers at district level in Al Jawf and Raymah governorates respectively on strengthening reporting and detection of communicable diseases, including cholera.
- A total of 49 and 80 mobile telephones have been distributed to the surveillance focal points at health facilities and district level in Al Jawf and Raymah governorates
- Provided Mukayras district in Al Bayda governorate with another DDK in this week.
- Provided Hadramaut Al Mukalla and Syune with ORS and two basic DDK

- A total of 3000 Rapid Diagnostic Test kits (RDTs) are being distributed to the governorates,(keeping 600 as contingency stock) and the already established (DTCs)
- Rapid Response Teams are investigating the new effected districts, Zungibar, Sa'fan and Zabid in Abyan, Sana'a and Al Hudaydah governorates, respectively.
- WHO is supporting the response in the 4 new districts that reported confirmed cases along with health cluster partners.

WASH Response

WASH Cluster partners have continued response efforts in 29 districts where confirmed cases have been reported. Below are summaries of activities in governorates where high number of cases are reported cumulatively and during the last reporting week (10 to 17 November).

In Aden,

- WASH Cluster partners are undertaking WASH cholera/AWD response interventions including distribution of hygiene kits, ICE materials and chlorination tablets in three districts where Cholera cases has been reported Al Buraiqeh, Dar Sad and Khur Maksar districts, covering up to 12,000 beneficiaries. Additionally, cluster partners are conducting hygiene promotion activities including through the mass media, public and school session.

In Ibb,

- Cluster partners undertook household interventions, reaching 6,412 beneficiaries with WASH package including chlorination tablets and disinfection of households water storage in four districts (Ibb, As Sabrah, Al Makhadir, Hazm Al Udayn). Additionally, 1,172 beneficiaries have been covered through Mass Cleaning campaign in Al Dhihar and Al Mashannah districts.

In Taiz,

- Chlorination tablets were distributed to 6,000 beneficiaries in Maqbanah and Al Mukha. WASH Cluster trained 327 people on water source chlorination and awareness briefing on water chlorination in household level to providing WASH services for 14 districts of Taiz.

In Al Hudaydah,

- Chlorination tablets were provided to 1,600 beneficiaries in Al Hali district.
- 27,887 beneficiaries in Al Hali and Al Mina districts were reached through water trucking (chlorinated water) interventions.
- WASH Cluster trained 150 people on water source chlorination and awareness briefing on water chlorination at household level. in Al Hali and Al Mina districts.
- More than 40,000 beneficiaries were covered by Hygiene promotion interventions, including household visits in Al Hali district.

In Al Bayda,

- WASH Cluster conducted house-to-house visits, reaching 4,390 beneficiaries with WASH package including distribution of Consumable Hygiene Kits, ICE materials and chlorination tablets in two districts where Cholera cases were reported (Ash Sharyah and Mukayras districts).
- WASH Cluster trained 60 people in Ash Sharyah and Mukayras districts on water source chlorination and awareness briefing on water chlorination at household level.

Challenges:

- Cholera interventions in Taizz Al Wazi'iyah District have been delayed due to the prevailing security situation. The cluster is working with the national Cholera taskforce to explore ways for facilitating response in the district.

Funding

The revised Integrated Cholera Response Plan² seeks a total of \$25.5 million, including \$12.3 million for activities in 29 districts, where confirmed cases are reported (as of 16 November). Considering available funding amounting to \$ 8 million (including \$3 million through reprogramming), the total net requirement stands at \$ 17.5 million.

Table 5. Summary of financial requirements by sector and priority (US\$)

Sector	Phase 1 ³	Phase 2 ⁴	Total requirements	Funding available	Donor
Health	5,077,655	6,551,000	11,628,655	700,000	CERF
WASH	7,227,000	6,652,000	13,879,000	1,300,000	CERF
WASH/Health				2,000,000	HPF
WHO				1,000,000	WHO
WASH				2,314,898	reprogramming
Health				220,746	reprogramming
WASH/Health				500,000	reprogramming
Total	12,304,655	13,203,000	25,507,655	8,035,644	

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² Released on 16 November 2016.

³ Health, WASH and communications activities in 29 districts where cholera cases have been confirmed as of 17 November.

⁴ Health, WASH and communications activities 58 districts that are at high risk due to presence of suspected cases, past endemic outbreaks and other risk factors