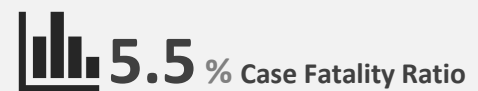


1. Highlights

Diphtheria



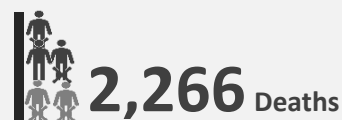
- As of 17 March 2018, the local health authorities reported a total of 1,368 suspected diphtheria cases including 76 associated deaths (CFR=5.5%).
- The diphtheria outbreak has affected 179 districts from 20 governorates. Ibb and Al Hudaydah governorates are the most affected governorates.
- Children (<5 years of age) represent 20 % of probable diphtheria cases and 41% of associated deaths. The most affected age group is 5-15 years old representing 45 % of the cases.
- A cumulative total of 6,093 diphtheria contacts have been given preventative antibiotics, 265 during week 11.
- The 1st round Diphtheria vaccination Campaign was conducted in 37 out of the 39 priority districts from 10-15 March 2018.,



Cholera



- The cumulative total of suspected cholera cases reported since April 2017 to 17 March 2018 is 1,080,422 with 2,266 associated deaths across the country. At governorate level, the trend from W9 -W11 decreased or was stable in all governorates expect for Al Mahweet (+13% .
- The overall case fatality ratio is 0.21% and the national attack rate is 386 per 10,000 people. Children (< 5 years of age) represent 28.8 % of the total suspected cases



2. Diphtheria Outbreak Response

2.1 Surveillance and Response

- There is a total of 1,368 probable diphtheria cases including 76 associated deaths (CFR=5.5 %); with most cases reported from Ibb (447 cases) and Al Hudaydah (158 cases) governorates.
- A cumulative total of 6,093 contacts have been traced by district rapid response teams (RRTs) in 18 governorates since the beginning of the outbreak.
- Sustainable Development Foundation (SDF) and WHO conducted training for health partners on diphtheria case management and response.
- The curriculum and a plan for 'train the trainers' for clinicians in the management of diphtheria cases has been developed but is yet to be implemented awaiting local authorities' approval.
- A total of 1000 vials of DAT have been received.
- There are 12 prioritized DIUs functioning and 15 DIUs and ICUS.
- A total of 2,388 bottles of Azithromycin 200 mg and 9500 vial of Penicillin G3g was distributed to the diphtheria treatment facilities. The procurement of additional antibiotics is ongoing and will be distributed to the diphtheria isolation units and intensive care units (See the table).

No	Governorate	Azithromycin 200 mg	Penicillin G3g vial
1	Al Hudaydah	293	1166
2	Al Mahwit	178	708
3	Amanat Al Asimah	373	1417
4	Amran	104	415
5	Dhamar	176	701
6	Hajjah	145	577
7	Ibb	523	2082
8	Sa'ada	84	400
9	Sana'a	381	1515
10	Taizz	130	518
Total		2388	9500



2.2 Vaccination Campaign

- The 1st round of the Diphtheria vaccination campaign was conducted in 37 out of the 39 priority districts from 10-15 March 2018, targeting children 6 weeks to <7 years with Penta vaccine and 7-15 Years with Td vaccine. The campaign in 2 districts of Taiz was delayed to allow for better preparations.
- Reports from the field monitors indicate a good acceptance rate for the vaccination.
- There were reports of refusals by parents and schools because of the negative messages about Diphtheria vaccination spread through social media.
- Early coverage data: In total, 670,884 children aged 6 weeks to 6 years were vaccinated with **penta** vaccine (coverage=48%). 1,041,256 children aged 7-15 years were vaccinated with **TD** vaccine (coverage=82%).



2.3 Laboratory

- Laboratory reagents and transport media were procured by WHO for the Central Public Health Laboratories (CPHLs) in Sana'a and Aden to enable the diagnosis and laboratory confirmation of diphtheria cases. Further supplies have been ordered.
- 13 cases for *C. diphtheriae* have been confirmed by culture at CPHL-Sana'a, recently 4 new cases were diagnosed from: Bait Al Jalal, Maen and Al Sabeen (Amanat Al Asimah governorate), and Wadi Rejam (Sana'a governorate).
- A total of 212 tests (Albert stein and Gram stein) were carried out at the CPHL as of 10 March 2018. In total, 31 cultures were performed, 13 of them were positive.

2.4 Emergency Risk Communications

- On March 16, WHO issued a press release immediately following the diphtheria vaccination campaign which garnered local and international
- Based on reports from WHO hubs in the field, it was noted that rumours of adverse effects following immunization (AEFI) and the source/origin of the vaccine were some of the main rumours fueling incidences of vaccine hesitancy in communities.
- Social media monitoring was conducted post-, WHO was able to isolate 5 top rumors, and is now actively responding to them through information videos posted on FB as well as media interviews (local and international).
- The most recent video posted addressing the issue of AEFI has gone viral in Yemen, with an organic (i.e. unpaid/no-boosting) reach of over 75 000 people, 23 000 views and 610 shares. Over 100 comments were examined and commonalities noted, most of which point to a rumor management strategy in advance of the 2nd and 3rd rounds of immunization. Link AEFI to video here: <https://www.facebook.com/WHOYemen/videos/2059212854366312/>

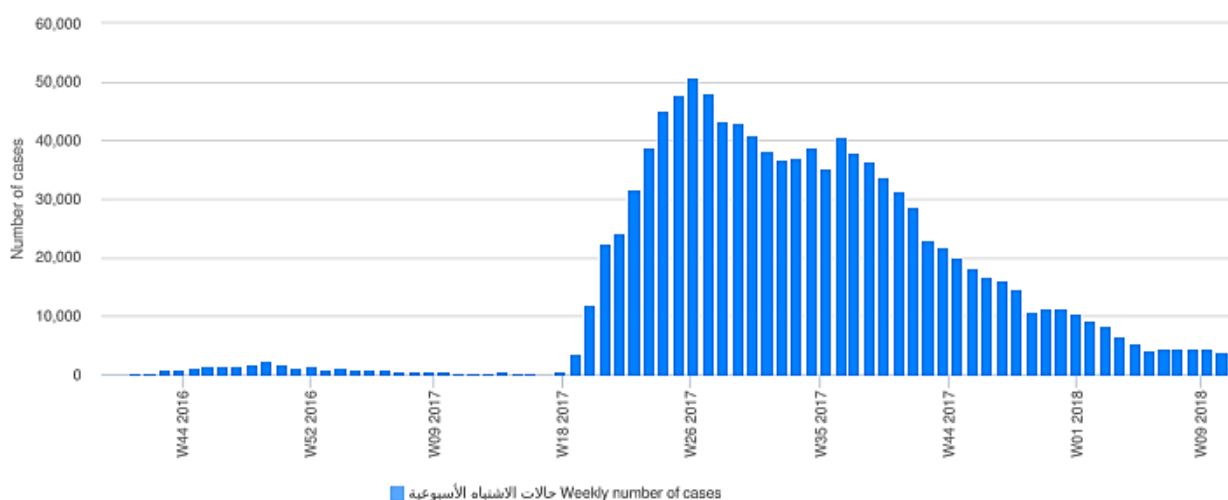
3. Cholera Outbreak Response



3.1 Surveillance and Response

- A total of 1,080,422 suspected cases and 2,266 associated deaths (CFR 0.21%) have been reported as of 17 March 2018.
- The weekly proportion of severe cases has decreased now representing 11 % of the admitted cases.
- The outbreak has affected 22 out of 23 governorates (96%) and 305 out of 333 districts (92%). At national level, the trend from W9 –W11 decrease or was stable in all governorates except (Al Mahweet +13%).
- As of week 11, there are 3,048 suspected cases and 2 associated deaths. The districts reporting the highest number of cases are Utmah (159), As Saddah (121), Al Hali (121). 11% are severe cases.
- Rapid Response Teams (RRTs) are conducting field investigations, active case finding and rapid reporting of deaths from severe dehydration, referral, providing health education, sample transportation and collection of water supplies (district and governorate level).

Figure 1. Epi curve of suspected cholera cases (n=1,080,422), April 2017 to 17 March 2018.



3.2 Health cluster Response

- Health Cluster partners are maintaining 146 Diarrhoea treatment centres DTCs and 249 Oral Rehydration Corners (ORCs) found across 96 affected districts in 17 governorates.



3.3 Laboratory

- Support is ongoing to strengthen laboratory sampling and diagnostics in-country and availability of supplies and reagents.
- Cumulatively, a total of 34,965 rapid diagnostic tests (RDT) have been performed which represents 32 % coverage as of week 10 (based on the expectation that 1 in 10 cases are tested).
- The last positive culture was on 9 March 2018 in Al Hali district in Al Hudaydah governorate. In week 11, a total of 1,061 RDTs were performed, 141 were positive.



4. Challenges

- Restricted access remains a major challenge to reaching those most in need.
- Additional training for clinicians is urgently required to increase the usage of DAT.
- Vaccination of HCWs is needed in diphtheria DIUs and ICUs.
- Blockage of borders and the halt of delivery of humanitarian aid into Yemen have devastating effects on the response to disease outbreaks within the country impacting on the delivery of life-saving medical supplies.



5. Recommendations

- Continue to strengthen early warning, alert and response activities, including full utilization of EOCs. In addition of the current 8 functioning EOCs, a further 17 EOCs are planned for completion in late March 2018 (Annex 1).
- Support, monitor and supervise the district Rapid Response Teams (RRTs) to conduct contact tracing of diphtheria cases through daily contact, investigation of reported cholera cases from newly affected areas and other relevant activities.
- Ensure monitoring and evaluation of communications and social mobilization activities to gauge uptake and presence of communities at vaccination points. Percentages of those vaccinated should increase in 2nd and 3rd rounds.
- Enhance health facilities to enable electronic data entry focusing on surveillance of diphtheria and cholera and other epidemic-prone diseases.
- Increase the capacity of laboratories for testing of epidemic-prone diseases through procurement of relevant supplies and training.
- Continue to procure, distribute and stockpile supplies such as DAT, antibiotics, cholera kits, medical and laboratory supplies.
- Strengthen community-based WASH activities and improve the collection of water samples using epidemiological data.
- Strengthen the communication to ensure population is well sensitized for the next round of vaccination against diphtheria.

Annex 1: EOC dashboard progressing report 19.03.2018

Gover	Annex 1: EOC dashboard progressing report 19.03.2018											
	Construction	Renovation pre-requisit	EOC site assessment	Furniture	IT Outsourcing	Electrical & Network infrastructure setup	Interent connectivity	PAPX	IT setup/installation	Handover documentation	Recurring Sop/Contract	Expected Delivering date to WHO
MoPH (Central EOC)	100%	100%	100%		NA ⁽²⁾	100%	100%	100%	100%	100%	100%	Delivered
Aden national	100%	100%	100%		0%	100%	100%	100%	100%	100%	100%	Delivered
WHO CO.					NA ⁽²⁾		100%		100%	100%	100%	Delivered
Amran	100%	100%	100%	100%	0%	100%	100% ⁽¹⁾	100%	100%	100%	100%	Delivered
Sana'a Gov	100%	100%	100%	100%	NA ⁽²⁾	100%	100%	100%	100%	100%	100%	Delivered
Ibb	100%	100%	100%	100%	NA ⁽²⁾	100%	100% ⁽¹⁾	100%	100%	100%	100%	Delivered
Hodaydah	100%	100%	100%	100%	NA ⁽²⁾	100%	100%	100%	100%	100%	100%	Delivered
Hajjah	100%	100%	100%	100%	0%	100%	100% ⁽¹⁾	100%	100%	100%	100%	Delivered
Aden Gov.	100%	100%	100%	100%	0%	0%	0%	0%	0%	0%	0%	04-10-18
Abyan	100%	100%	100%	100%	0%	0%	0%	0%	0%	0%	0%	04-10-18
Al Dalea	100%	100%	100%	100%	0%	0%	0%	0%	0%	0%	0%	04-10-18
Lahj	100%	100%	100%	100%	0%	0%	0%	0%	0%	0%	0%	04-10-18
Shabwah	100%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	20/4/2018
AlMukallah	100%	100%	100%	100%	0%	0%	0%	0%	0%	0%	0%	20/4/2018
Al Mahara	100%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	05-07-18
Amanat AlAsema	100%	100%	100%	100%	0%	0%	0%	0%	0%	0%	0%	29/3/2018
Taiz Enclave	100%	100%	100%	100%	0%	0%	0%	0%	0%	0%	0%	20/4/2018
Marib	100%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	20/4/2018
Al Jawf	100%	100%	100%	100%	0%	0%	0%	0%	0%	0%	0%	29/4/2018
Dhamar	100%	100%	100%	100%	0%	0%	0%	0%	0%	0%	0%	29/3/2018
Al Mahweet	100%	100%	100%	100%	0%	0%	0%	0%	0%	0%	0%	29/3/2018
Al Bayda	100%	100%	100%	100%	0%	0%	0%	0%	0%	0%	0%	20/4/2018
Sa'da	100%	100%	100%	100%	0%	0%	0%	0%	0%	0%	0%	05-07-18
Raymah	100%	100%	100%	100%	0%	0%	0%	0%	0%	0%	0%	05-07-18
Sayoun	100%	100%	100%	100%	0%	0%	0%	0%	0%	0%	0%	05-07-18

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