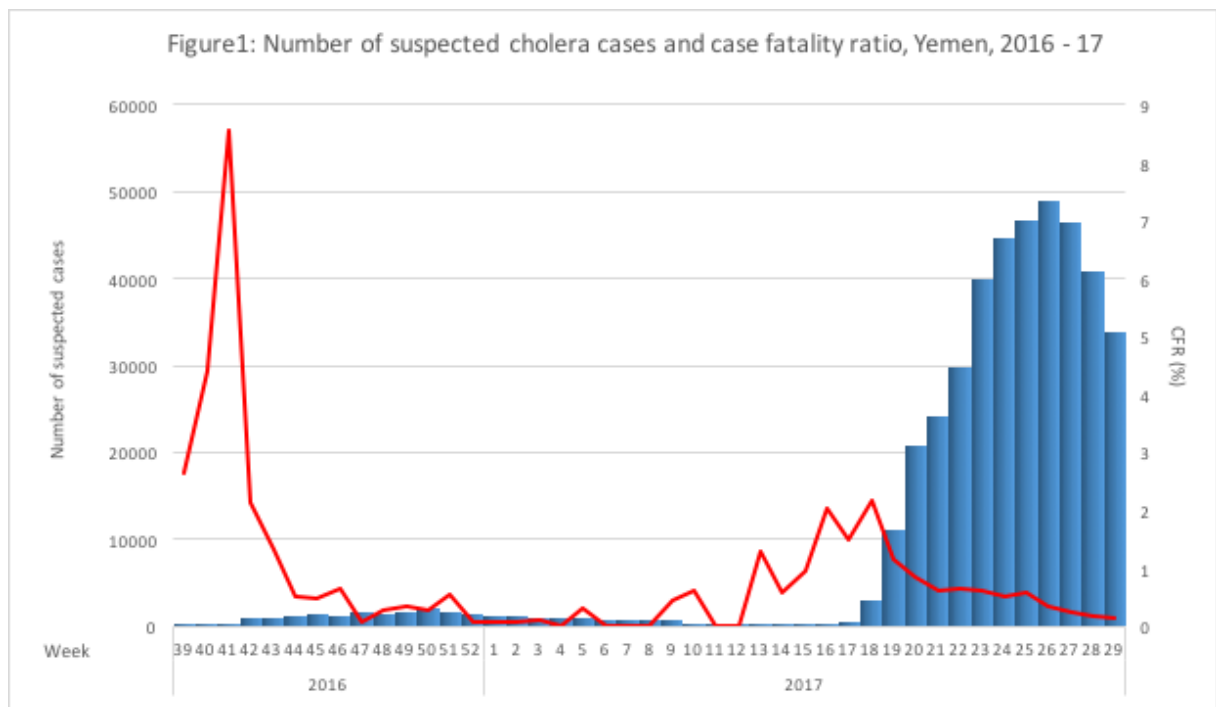


Highlights

- During week 29 (from 16 to 22 July 2017), **34 253 suspected cholera cases and 44 deaths** were reported in Yemen.
- Since the beginning of this outbreak second wave (from 27 April to 23 July 2017), **390,865 suspected cholera cases, and 1 864 deaths** (CFR: 0.5%) have been reported in 21 of the country 23 governorates (91.0%), and in 88.6% of the districts (295/333).
- About **2%** of the total population have been affected.
- The overall epidemic curve shows that the peak of this second wave was reached week 26 and the number of new suspected cholera cases is steadily declining.



Geographical distribution of cases

The five most affected governorates were Amanat Al Asimah, Al Hudaydah, Hajjah, Amran and Ibb with 53.3% (208 464/390 865) of the cases reported **since 27 April 2017**. Al Mahwit governorate had the highest attack rate (29.7‰), followed by Al Dhale'e and Amran governorates (29.1‰ and 26.0‰ respectively) (see table 1 and figure 2).

Table 1: Number of cholera cases and attack rate by governorate, Yemen, 27 April – 23 July 2017

Governorate	Cases	Attack Rate (‰)
Amanat Al Asimah	49 311	14.9
Al-Hudaydah	48 436	14.5
Hajjah	41 385	18.6
Amran	39 803	26.0
Ibb	29 529	9.6
Dhamar	28 829	13.6
Taizz	27 638	9.1
Sana'a	26 498	21.2
Al Mahwit	22 621	29.7
Al Dhale'e	21 935	29.1
Aden	11 987	12.5
Abyan	11 823	19.3
Al Bayda	11 774	15.3
Raymah	7 163	11.3
Lahj	4 583	4.4
Al_Jawf	3 532	5.4
Ma'areb	2 065	5.7
Sa'ada	938	1.1
AL Mahrah	620	3.8
Shabwah	388	0.6
Say'on	7	0.0
Total	390 865	20.2

During week 29, 34 253 suspected cases and 44 deaths of cholera were reported in 21 governorates and 263 districts (see table 2). The highest numbers of cases were reported in Al Hudaydah and Dhamar governorates, and in the districts of Maqbanah (Taizz gov., 874 cases, 1 death), Khanfir (Abyan gov., 767 cases), Utmah (Dhamar gov., 695 cases) and Milhan (Al Mahwit gov., 667 cases, 1 death).

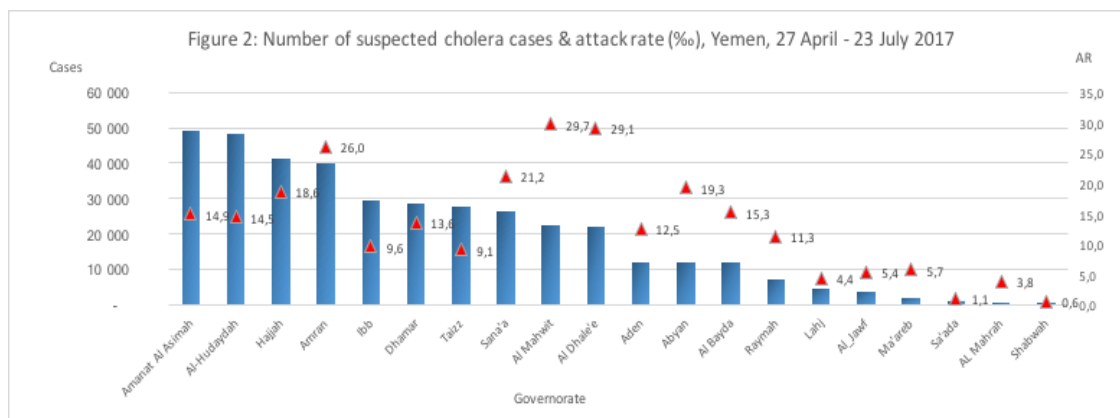
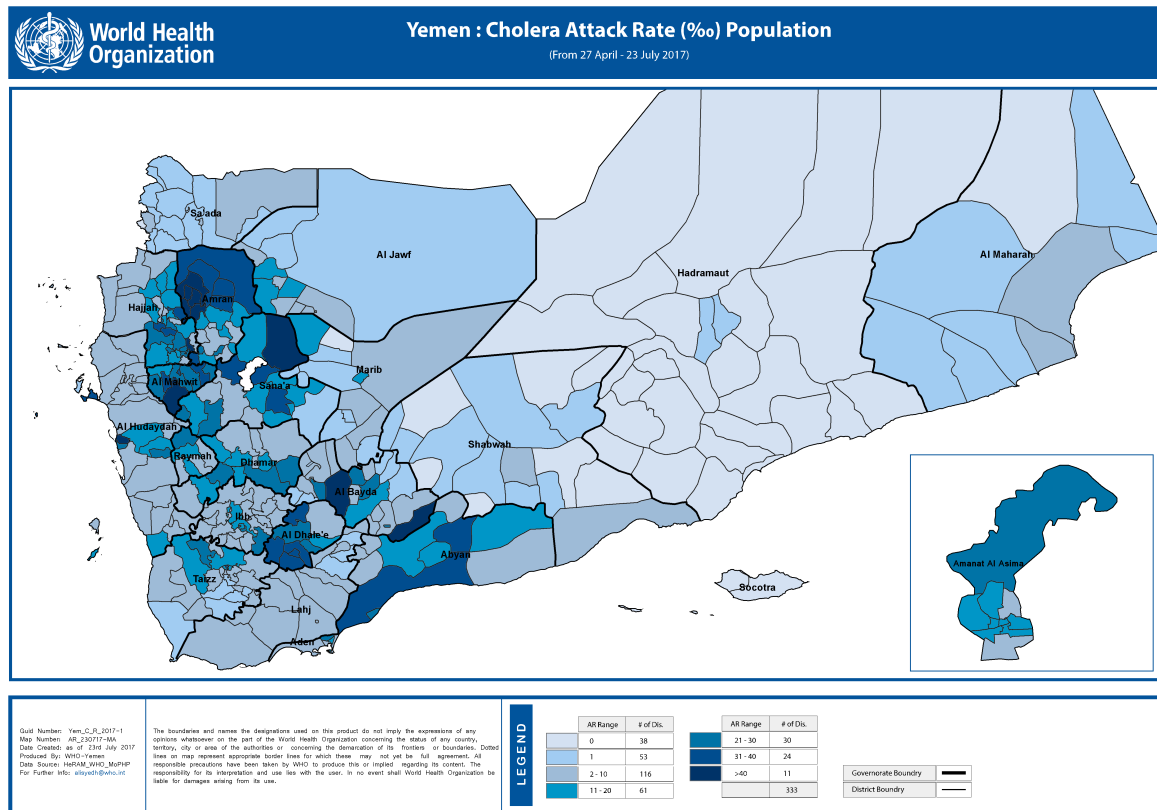


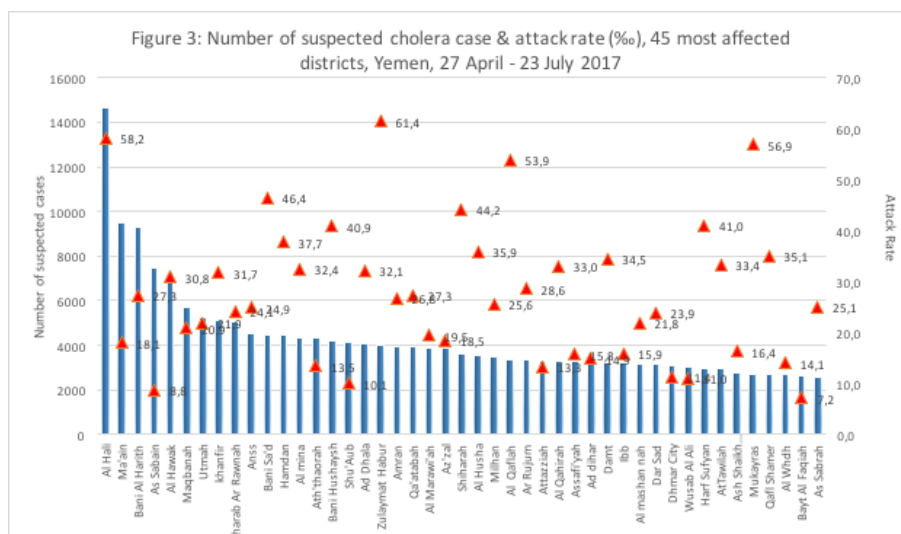
Table 2: Number of cholera cases and deaths by governorate, Yemen, week 29 - 2017

Governorate	Cases	Deaths
Al-Hudaydah	4 310	10
Dhamar	4 255	2
Amran	3 049	1
Hajjah	3 030	5
Al Mahwit	2 855	3
Amanat Al Asimah	2 648	1
Taizz	2 603	7
Al Dhale'e	2 336	1
Ibb	1 925	4
Abyan	1 613	1
Aden	1 312	1
Al Bayda	1 121	1
Sana'a	1 056	1
Raymah	717	5
Al_Jawf	661	-
Ma'areb	281	-
Sa'ada	231	1
AL Mahrah	123	-
Shabwah	83	-
Lahj	43	-
Say'on	1	-
Total	34 253	44

This map shows the suspected cholera attack rate (‰) per district

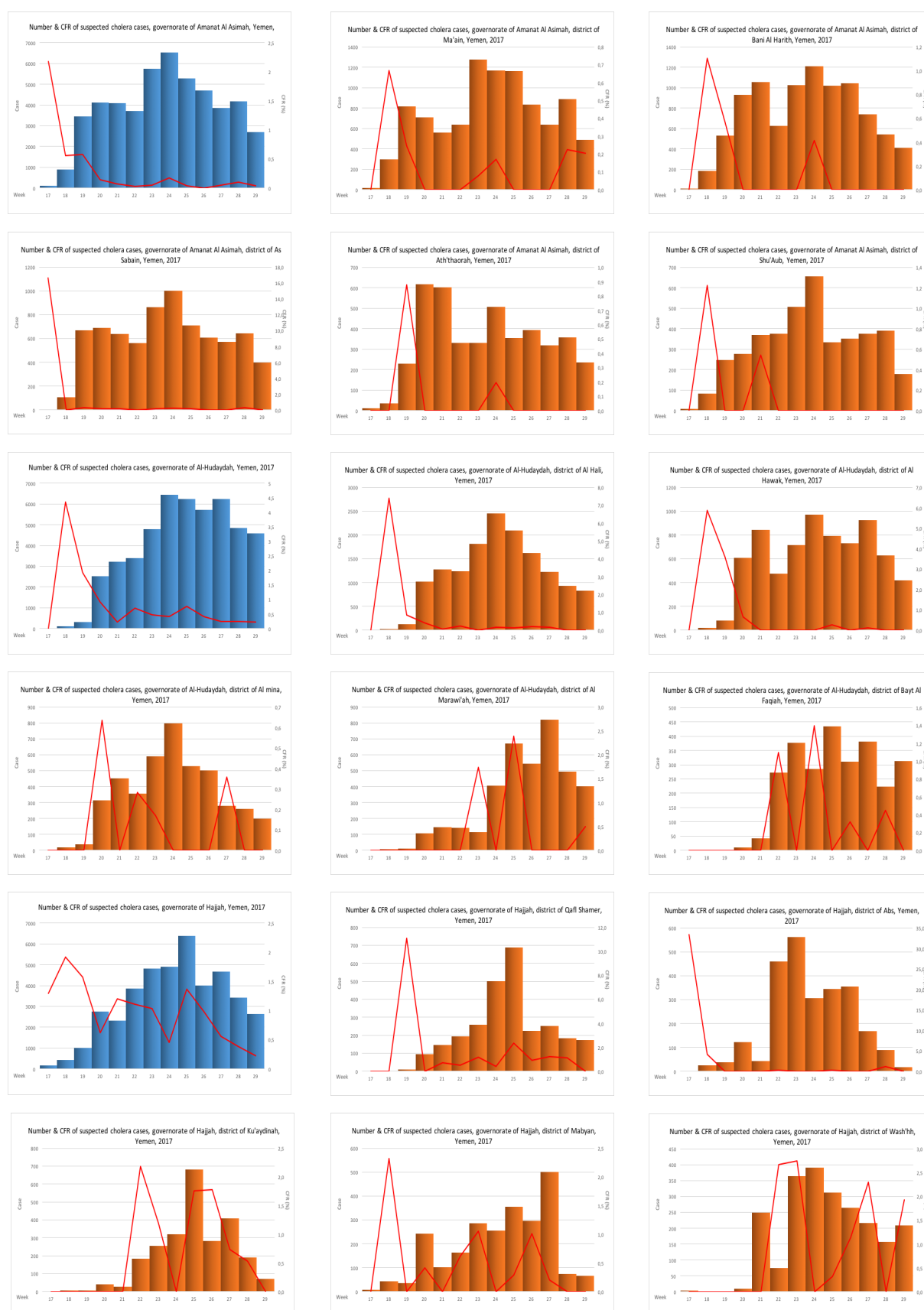


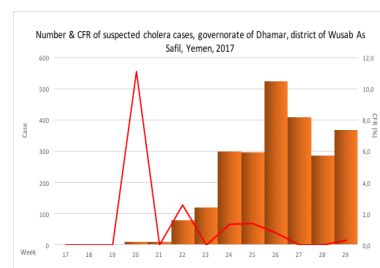
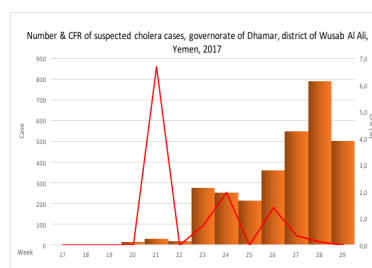
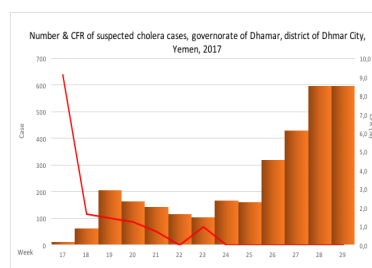
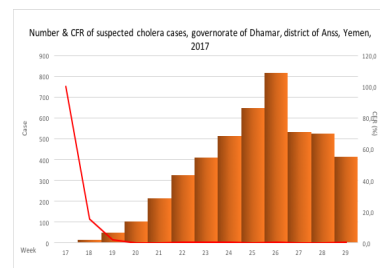
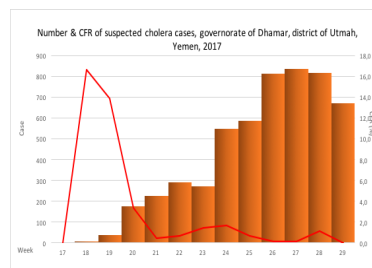
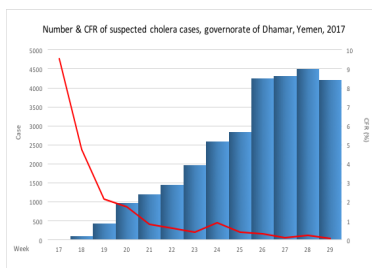
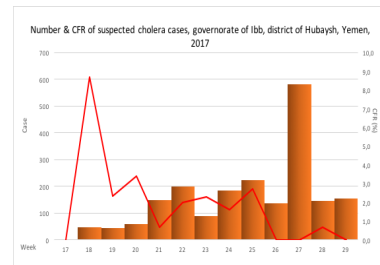
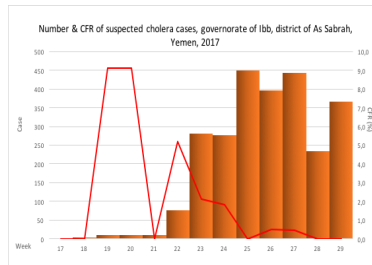
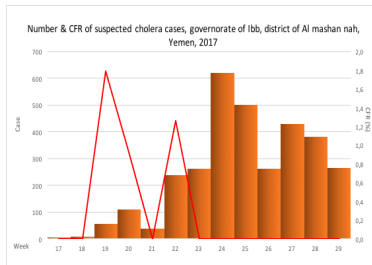
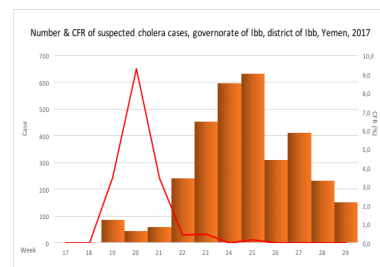
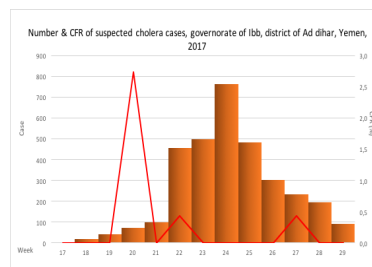
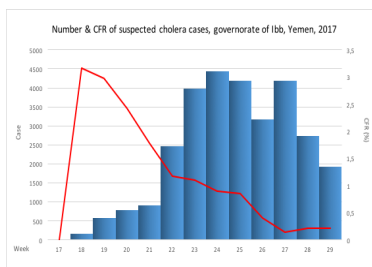
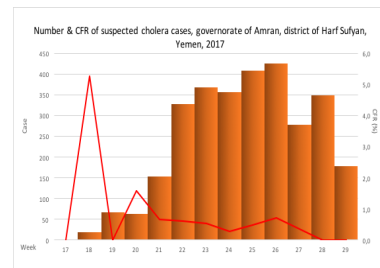
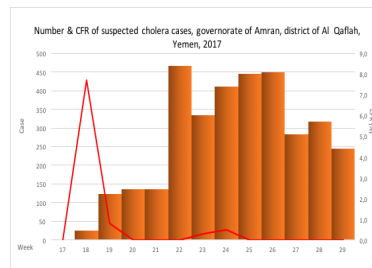
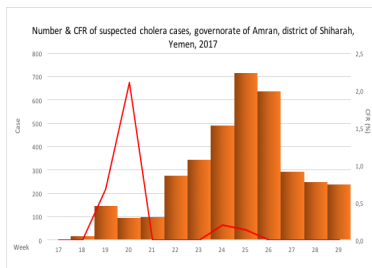
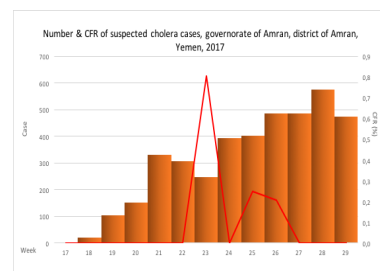
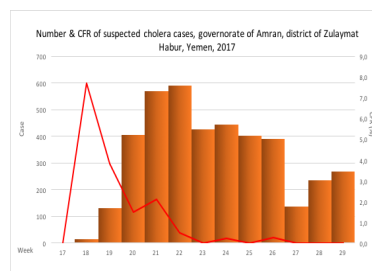
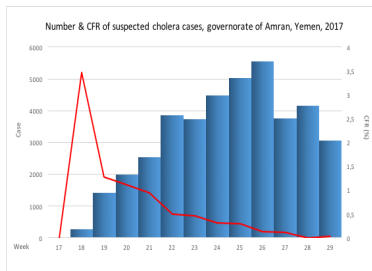
Since 27 April 88.6% of all districts (295/333) have been affected. Figure 3 shows the 45 most affected districts where 50.2% (194 850/388 174)¹ of the cases have been reported. The highest number of cases were reported in Al Hali (Al Hudaydah gov., 14 649 cases, 23 deaths), Ma'ain (Amanat Al Asimah gov., 9 492 cases, 10 deaths), Bani Al Harith (Amanat Al Asimah gov., 9 308 cases, 10 deaths), As Sabain (Al Asimah gov., 7 472 cases, 11 deaths), and Al Hawak (Al Hudaydah gov., 7 201 cases, 11 deaths). Zulaymat Habur (Amran gov.) and Al Hali (Al Hudaydah gov.) had the highest attack rates (respectively 61.4% and 58.2%).



¹ 2 691 missing values

Figure 4: Epidemic curves of most affected governorates and districts, Yemen, weeks 17 - 29 2017



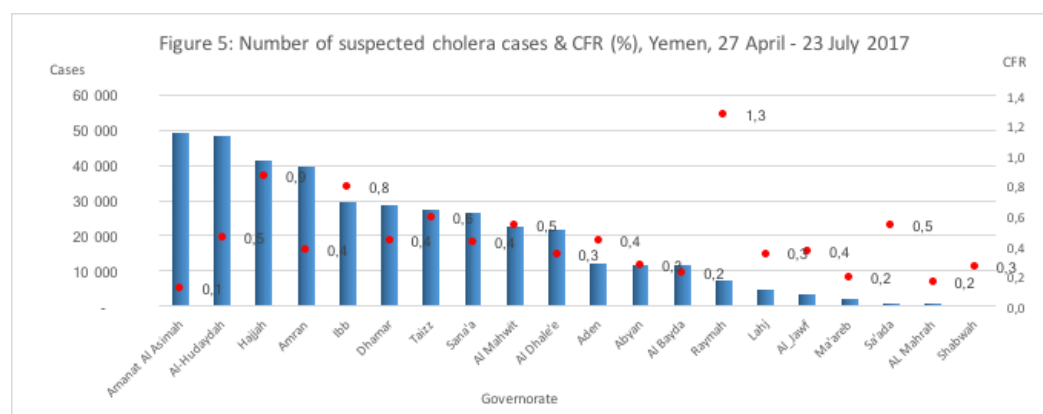


Case fatality ratio, and age and sex distribution

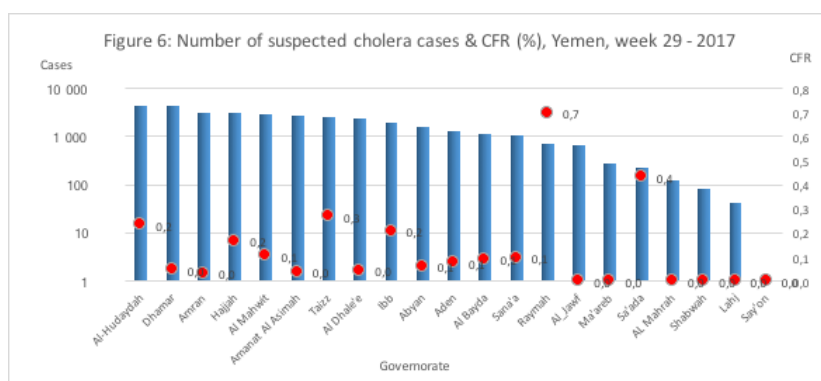
Table 3: Number of cholera cases and case fatality ratio (CFR), Yemen, 27 April – 23 July 2017

Governorate	Number of cases	Proportion of cases (%)	Number of deaths	CFR (%)
Amanat Al Asimah	49 311	12.6	60	0.1
Al-Hudaydah	48 436	12.4	221	0.5
Hajjah	41 385	10.6	357	0.9
Amran	39 803	10.2	150	0.4
Ibb	29 529	7.6	235	0.8
Dhamar	28 829	7.4	126	0.4
Taizz	27 638	7.1	164	0.6
Sana'a	26 498	6.8	114	0.4
Al Mahwit	22 621	5.8	121	0.5
Al Dhale'e	21 935	5.6	75	0.3
Aden	11 987	3.1	52	0.4
Abyan	11 823	3.0	32	0.3
Al Bayda	11 774	3.0	26	0.2
Raymah	7 163	1.8	91	1.3
Lahj	4 583	1.2	16	0.3
Al_Jawf	3 532	0.9	13	0.4
Ma'areb	2 065	0.5	4	0.2
Sa'ada	938	0.2	5	0.5
AL Mahrah	620	0.2	1	0.2
Shabwah	388	0.1	1	0.3
Say'on	7	0.0	-	-
Total	390 865	100.0	1 864	0.5

From 27 April to 23 July, the overall case fatality ratio (CFR) was 0.5 % (1 864/390 865). The highest CFR was reported in Raymah governorate (1.3%) (see table 3 and figure 5).



For the period of week 29, the overall CFR was 0.1% (44/34 253) (see figure 6, main y axis is logarithmic).



The male/female sex ratio was 0.9. The highest proportion of cases was still seen in the 15-29 year age group (i.e. 27.2%). The proportion of patients under 5 y.o. is increasing. Patients aged under 18 years old were 49.3% of the total. People in the ≥ 60 years age-group were more at risk of dying (CFR: 2.5%), followed by cases in the 45-59 year age group (CFR: 0.9%) (see table 4). CFR was slightly higher in male than in female cases (respectively 0.50% and 0.45%).

Table 4: Distribution of cholera cases and deaths by age, Yemen, 27 April – 23 July 2017

Age (y.o.)	Cases				Deaths			
	Male	Female	Total*	% of cases	Male	Female	Total**	CFR (%)
< 5	43 052	35 895	78 947	20.3	173	124	297	0.4
5 - 14	47 674	42 513	90 187	23.2	143	137	280	0.3
15 - 29	44 592	60 916	105 508	27.2	71	100	171	0.2
30 - 44	25 862	35 135	60 997	15.7	107	140	247	0.4
45 - 59	12 732	16 516	29 248	7.5	142	126	268	0.9
≥ 60	11 135	12 516	23 651	6.1	297	288	585	2.5
Total	185 047	203 491	388 538	100.0	933	915	1 848	0.5
*2 327 missing values					**16 missing values			

Prepared by:

Dr Xavier de Radiguès
C: +967 738 445 522

For further information:

Dr Ahmed Zouiten
zouitena@who.int

Lauren O'Connor
Communication officer
oconnorl@who.int

Note: This bulletin is released once a week. A shorter update is proposed daily. You can find them on EMRO [website](#).