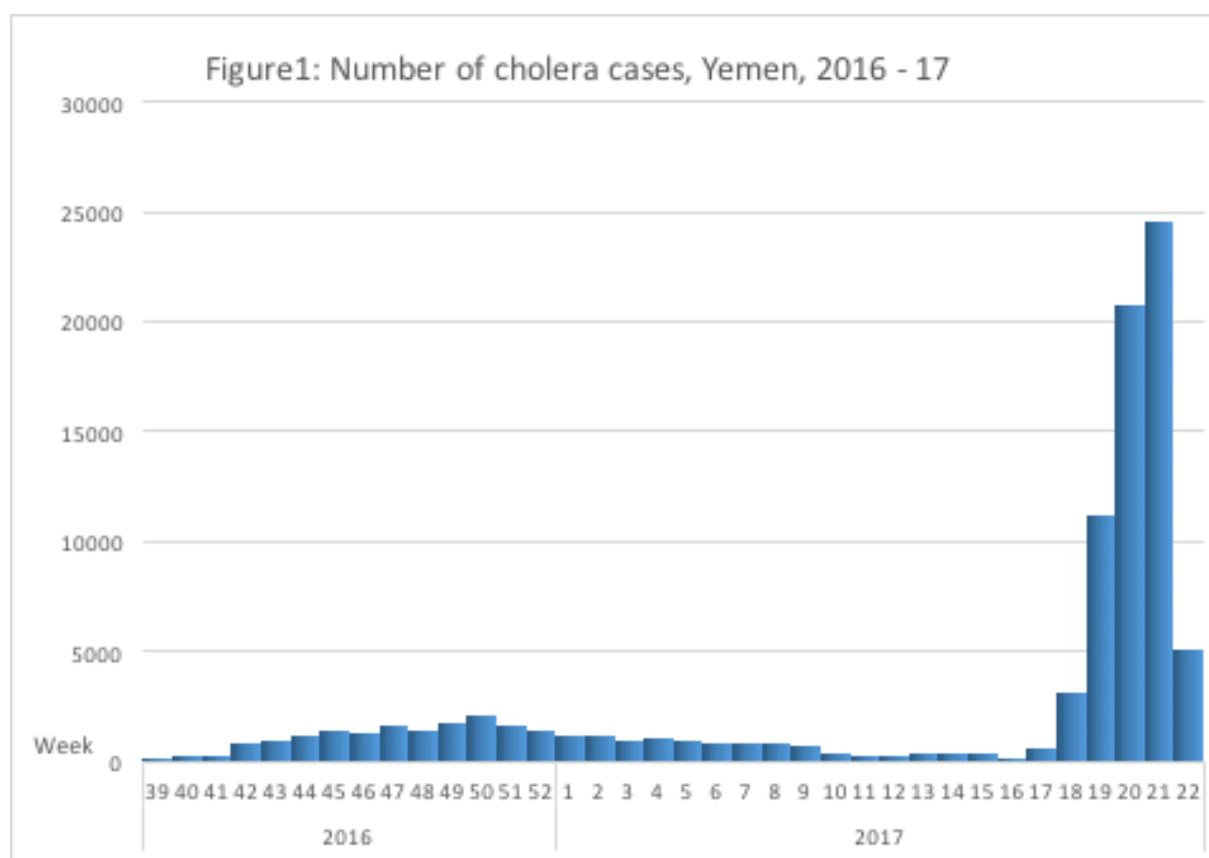


## Highlights

- From 27 April to 30 May 2017, 65 041 suspected<sup>1</sup> and 316 confirmed cholera cases, and 532 deaths (CFR: 0.8%) have been reported in 19 of the country 23 governorates (82.6%). Most of the cases were still reported in the western governorates.
- Between 28 and 30 May, 6 150 cases and 23 deaths (CFR: 0.4%) of cholera were reported.
- Although during the last seven days (24 – 30 May 2017) the daily average number of cases (i.e. 2 777 cases/day) decreased compared to the previous seven-day period (i.e. 3 369 cases/day), the outbreak doesn't seem to have reached yet its peak<sup>2</sup>. This trend can be seen in most of the affected governorates.



<sup>1</sup> The large increase of the number of cases between the previous report and the present one (i.e. over 13 000 cases) is due mainly to better completeness of reporting

<sup>2</sup> Week 22 is still uncomplete since it started Sunday 28 May

## Geographical distribution of cases

The four most affected governorates were Amanat Al Asimah, Hajjah, Amran, and Al Hudaydah, with 53.1% (34 685/65 357) of the cases reported **since 27 April 2017**. Al Mahwit governorate had still the highest attacks rate (55.8 per 10 000), followed by Sana'a governorate (49.9 per 10,000) (see table 1 and figure 2).

Table 1: Number of cholera cases and attack rate by governorate, Yemen, 27 April – 30 May 2017

Governorate	Cases	Attack Rate (per 10 000)
Amanat Al Asimah	13 700	41.4
Hajjah	7 143	32.2
Amran	6 977	45.6
Al-Hudaydah	6 865	20.5
Sana'a	6 224	49.8
Taizz	4 399	14.5
Al Mahwit	4 246	55.8
Al Bayda	3 136	40.7
Dhamar	3 033	14.3
Ibb	2 567	8.4
Al Dhale'e	2 371	31.5
Abyan	1 587	26.0
Aden	1 171	12.2
Raymah	902	14.2
Lahj	471	4.5
Al_Jawf	334	5.1
Ma'areb	114	3.2
Sa'ada	106	1.2
Shabwah	11	0.2
<b>Total</b>	<b>65 357</b>	<b>22.0</b>

**Since 28 May**, three districts reported for the first time (a total of 5 cases in three governorates). During the same period, 6 150 cases and 23 deaths of cholera were reported in 19 governorates and 193 districts (see table 2). The highest number of cases were reported in Amanat Al Asimah, Al Hudaydah and Amran governorates, and in the districts of Al Hali (Al Hudaydah gov., 440 cases), Maqbanah (Taizz gov., 258 cases), Bani Al Harith (Amanat Al Asimah gov., 242 cases), and Al Hawak (Al Hudaydah gov., 237 cases).

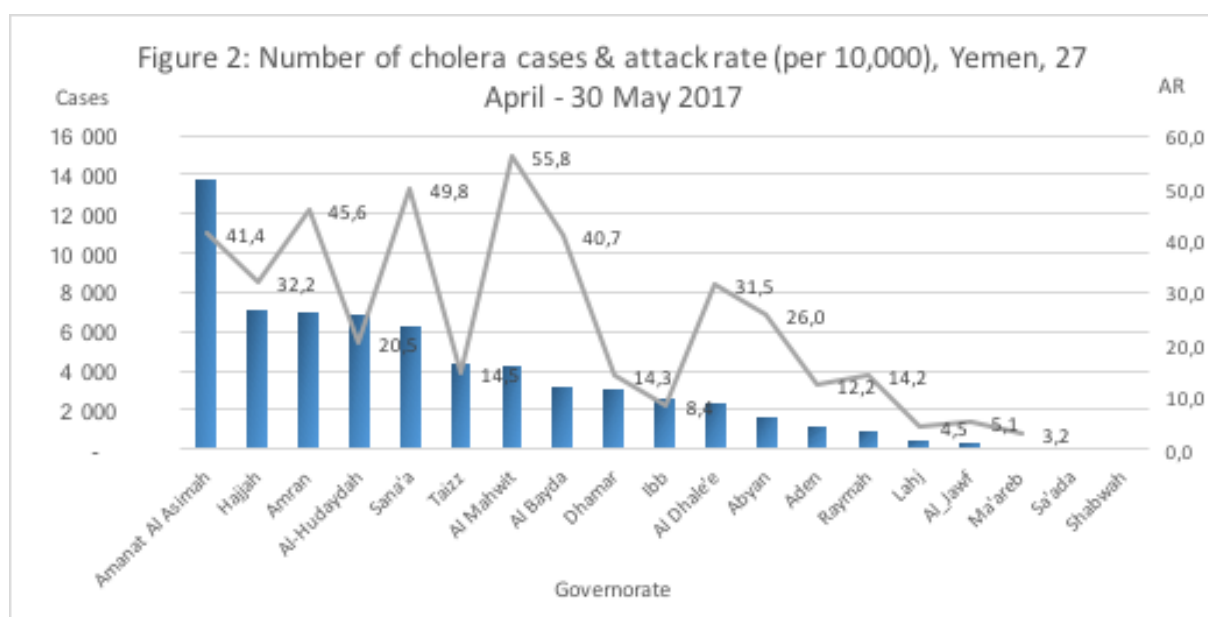
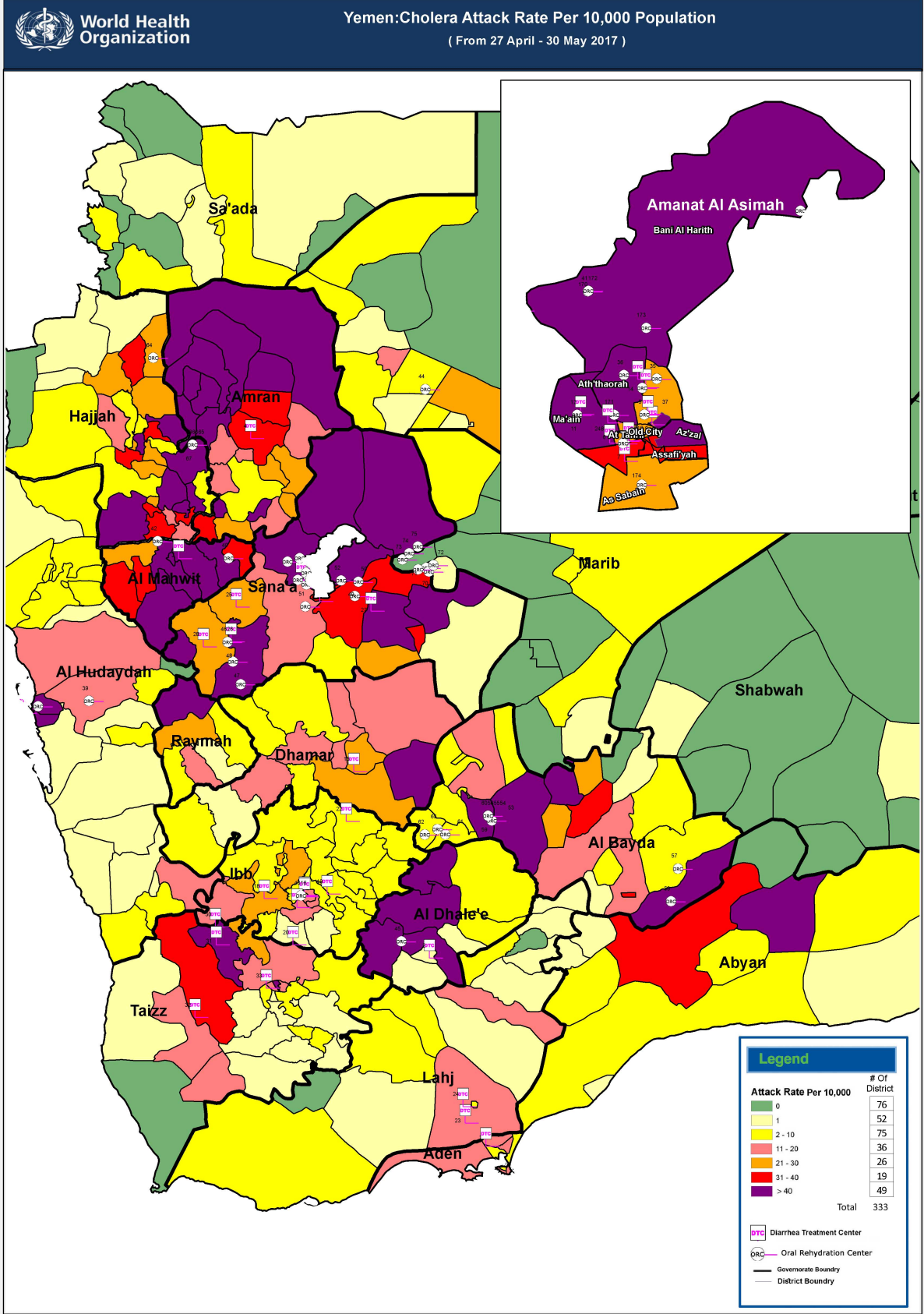


Table 2: Number of cholera cases and deaths by governorate, Yemen, 28 May – 30 May 2017

Governorate	Cases	Deaths
Amanat Al Asimah	1 132	-
Al-Hudaydah	1 105	3
Amran	760	3
Taizz	616	6
Al Bayda	380	1
Al Mahwit	345	3
Sana'a	334	-
Al Dhale'e	334	-
Dhamar	313	1
Hajjah	267	5
Aden	143	-
Abyan	106	-
Raymah	104	1
Lahj	97	-
Al_Jawf	59	-
Ma'areb	45	-
Sa'ada	7	-
Ibb	2	-
Shabwah	1	-
<b>Total</b>	<b>6 150</b>	<b>23</b>

The map shows the Yemen governorates, the attack rates per district per 10 000 population, and the distribution of cholera treatment facilities.



Since 27 April 77% of all districts (257/333) have been affected. Figure 3 shows the 30 most affected districts where 52.9% (34 347/64 878) of the cases have been reported. The highest number of cases were reported in Bani Al Harith and Ma'a'in districts, located in Amanat Al Alismah governorate, and Al Hali district in Al Hudaydah governorate. Ash Sharyah (Al Bayda gov.) and Zulaymat Habur (Amran gov.) had the highest attack rates (respectively 200.1 and 190.4 per 10 000).

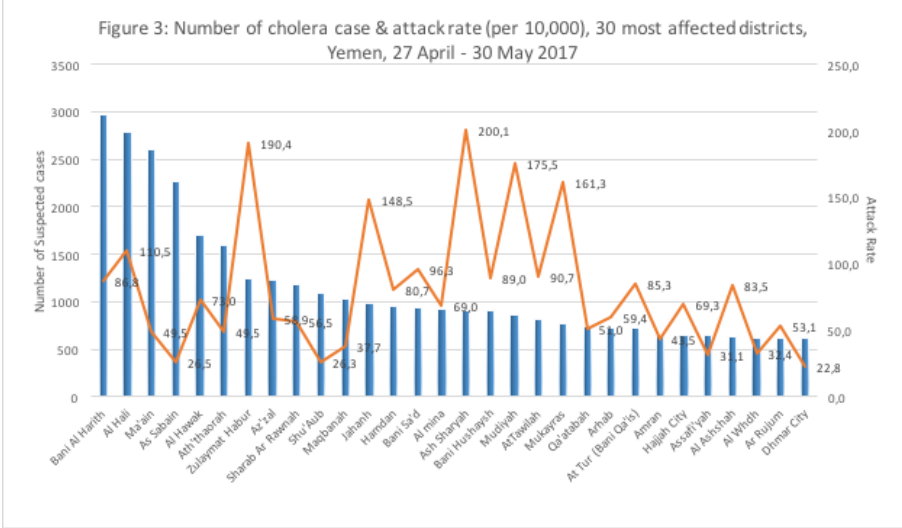


Figure 4: Epidemic curves for the four most affected governorates, Yemen, 27 April – 30 May 2017

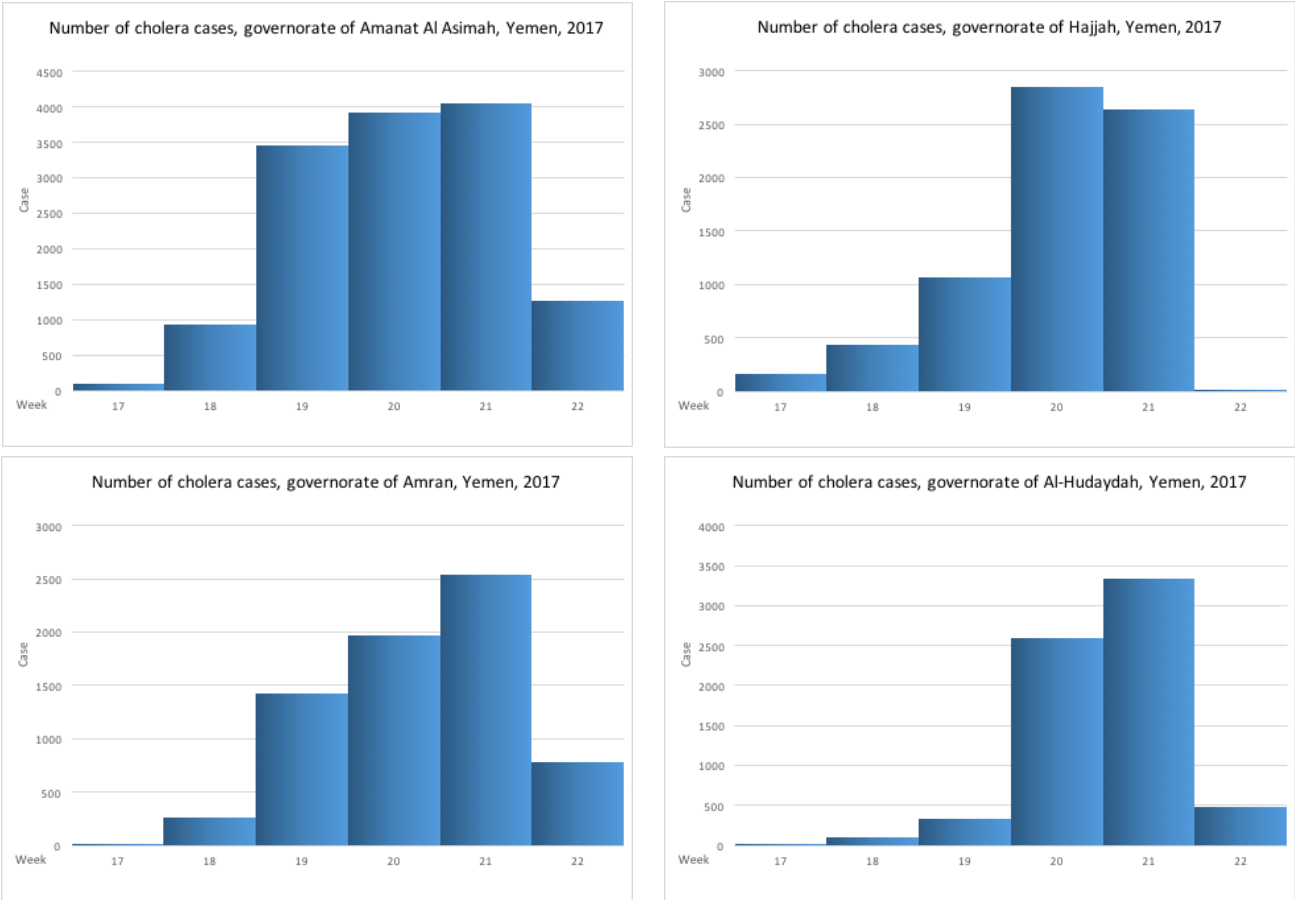
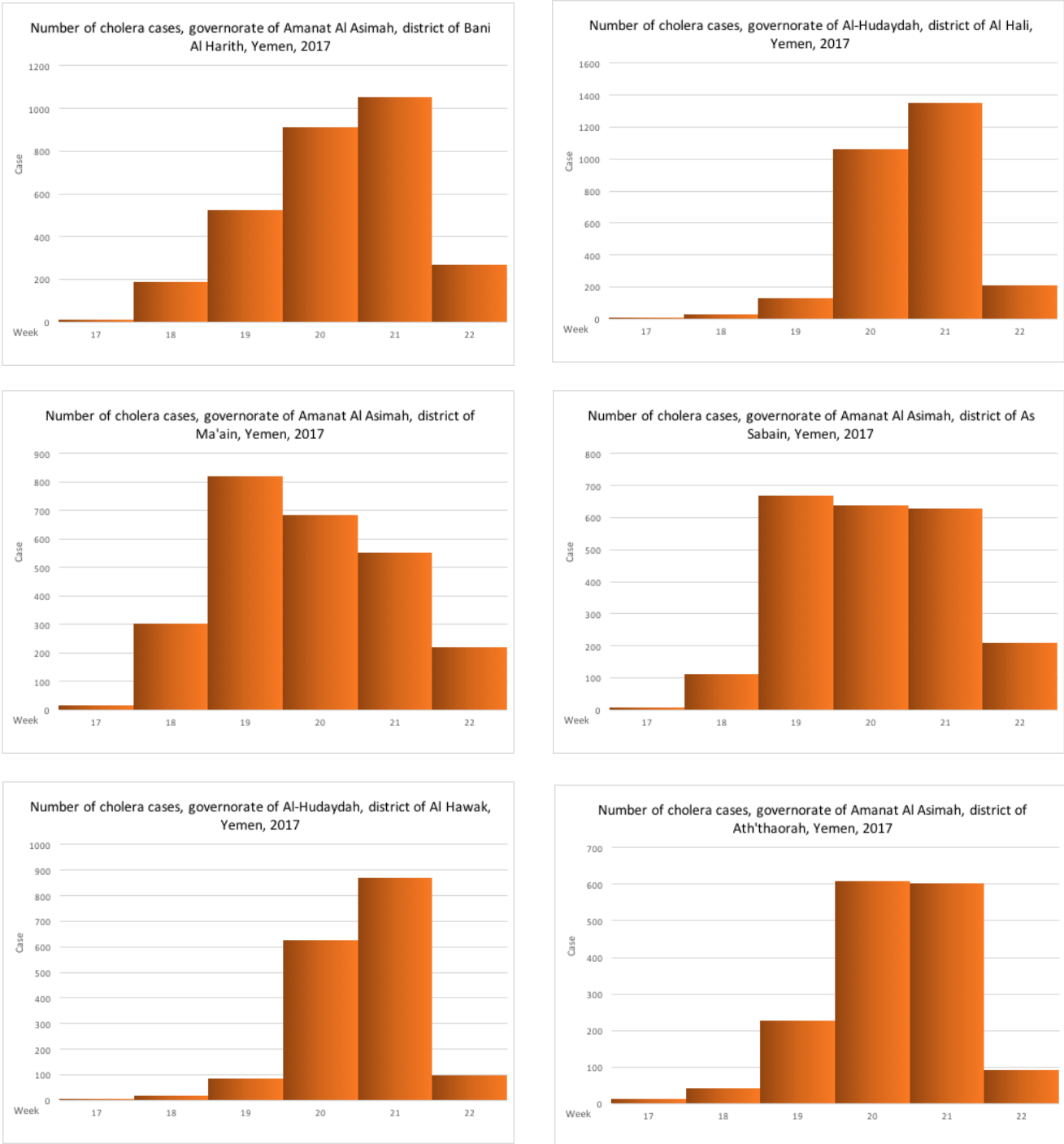


Figure 5: Epidemic curves for the six most affected districts, Yemen, 27 April – 30 May 2017



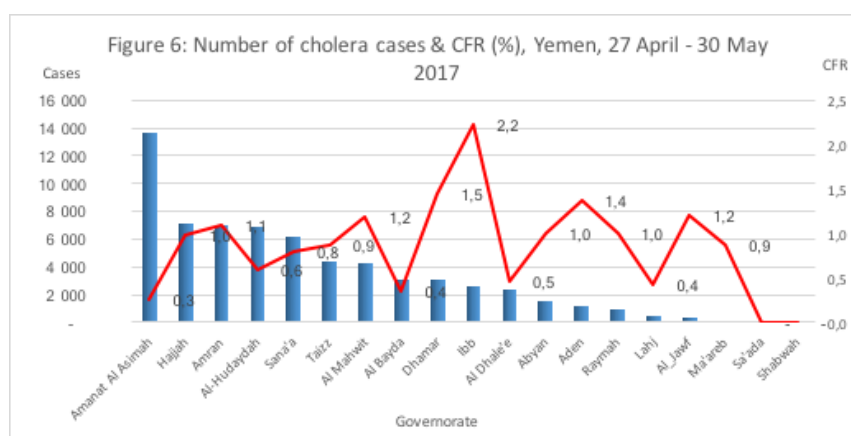
## Case fatality ratio, and age and sex distribution

Table 3: Number of cholera cases and case fatality ratio (CFR), Yemen, 27 April – 30 May 2017

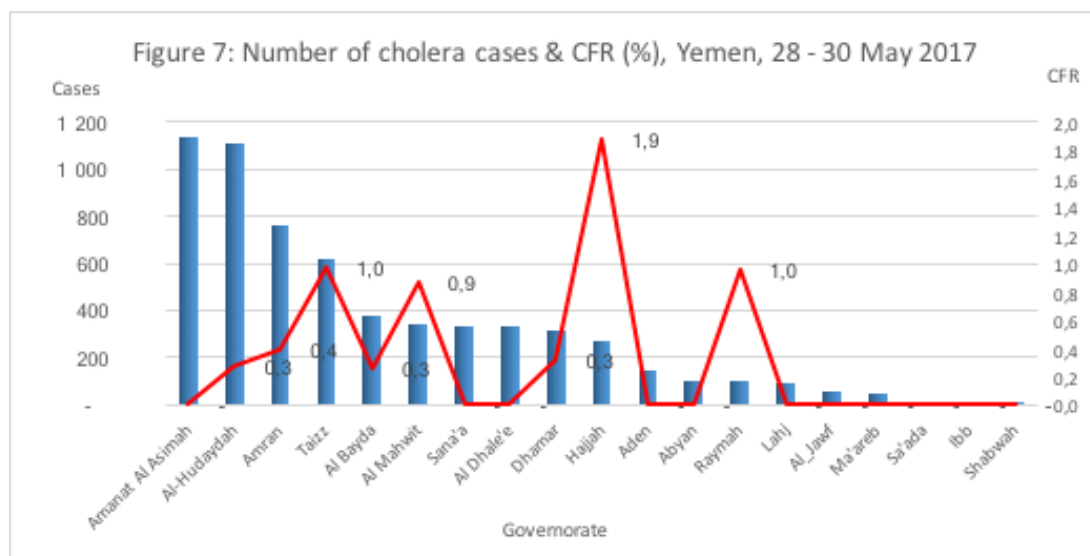
Governorate	Number of cases	Proportion of cases (%)	Number of deaths	CFR (%)
Amanat Al Asimah	13 700	21,0	36	0.3
Hajjah	7 143	10,9	70	1.0
Amran	6 977	10,7	76	1.1
Al-Hudaydah	6 865	10,5	41	0.6
Sana'a	6 224	9,5	50	0.8
Al Mahwit	4 246	6,5	50	1.2
Taizz	4 399	6,7	38	0.9
Dhamar	3 033	4,6	44	1.5
Al Bayda	3 136	4,8	11	0.4
Al Dhale'e	2 371	3,6	11	0.5
Ibb	2 567	3,9	57	2.2
Abyan	1 587	2,4	16	1.0
Aden	1 171	1,8	16	1.4
Raymah	902	1,4	9	1.0
Lahj	471	0,7	2	0.4
Al_Jawf	334	0,5	4	1.2
Ma'areb	114	0,2	1	0.9
Sa'ada	106	0,2	-	-
Shabwah	11	0,0	-	-
<b>Total</b>	<b>65 357</b>	<b>100.0</b>	<b>532</b>	<b>0.8</b>

From 27 April to 30 May, the case fatality ratio (CFR) was 0.8 % (532/65 367). The highest CFR were reported in Ibb, Dhamar and Aden governorates, respectively 2.2%, 1.5%, 1.4% and 1.6% (see table 3 and figure 6).

*The Ministry of health and WHO are investigating the reasons behind the high CFR in these governorates.*



Since 28 May, the total CFR decreased to 0.4% (23/6 150) but was still high in Hajjah governorate (1.9%, 5/267) (see figure 7).



The male/female sex ratio was 0.9. The highest proportion of cases was seen in the 15-29 year age group (i.e. 26.5%). People over 60 years old were more at risk of dying (CFR: 3.3%), followed by cases in the 45-60 year age group (CFR: 1.7%) (see table 4). CFR was higher in male than in female cases (respectively 0.9% and 0.8%). This difference was also reflected in most age groups, e.g. CFR of 2.0% and 1.4% for males and females in the 45-60 year age group, or CFR of 0.7% and 0.5% respectively in the 30-44 year age group.

Table 4: Distribution of cholera cases and deaths by age, Yemen, 27 April – 30 May 2017

Age (y.o.)	Cases				Deaths			
	Male	Female	Total*	% of cases	Male	Female	Total**	CFR (%)
< 5	6 568	5 470	12 038	18.4	43	24	67	0.6
5 - 14	7 649	6 774	14 423	22.1	42	43	85	0.6
15 - 29	7 022	10 290	17 312	<b>26.5</b>	20	29	49	0.3
30 - 44	4 243	6 495	10 738	16.4	28	34	62	0.6
45 - 60	2 293	3 312	5 605	8.6	47	47	94	<b>1.7</b>
> 60	2 384	2 841	5 225	8.0	78	96	174	<b>3.3</b>
<b>Total</b>	<b>30 159</b>	<b>35 182</b>	<b>65 341</b>	<b>100.0</b>	<b>258</b>	<b>273</b>	<b>531</b>	<b>0.8</b>
<b>*16 missing values</b>					<b>**1 missing value</b>			

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