



اليمن Yemen

الاستجابة للكوليرا Cholera Response

برنامج الترصد الالكتروني للأمراض
Electronic Disease Early Warning System (eDEWS)

النشرة الوبائية الأسبوعية
Weekly Epidemiological Bulletin
W52 2017 (Dec 25-Dec 31)

Printed: 07:23 Thursday, 04 January 2018 UTC

جدول المحتويات Table of Contents

A. Summary indicators	ملخص المؤشرات أ.
B. Epidemic curve	المنحنى الوبائي ب.
C. Key indicators by Governorate	المؤشرات الرئيسية حسب المحافظة ج.
D. Laboratory indicators	المؤشرات المختبرية د.
E. Geographic distribution over time	التوزيع الجغرافي مع مرور الوقت هـ.
F. Districts reporting in past week	المديريات ذات الأولوية هـ.
G. Epidemic curves by Governorate	المنحنى الوبائي حسب المحافظة هـ.

Highlights

Cumulative figures

- The cumulative total from 27 April 2017 to 31 December 2017 is 1,019,044 suspected cholera cases and 2,237 associated deaths, (CFR 0.22%), 1094 have been confirmed by culture.
- 59.3 % of death were severe cases at admission
- The total proportion of severe cases among the suspected cases is 16.9%
- The national attack rate is 370 per 10,000. The five governorates with the highest cumulative attack rates per 10,000 remain Amran (870), Al Mahwit (824), Al Dhale'e (644), Hajjah (498) and Abyan (494).
- Children under 5 years old represent 28.6% of total suspected cases.
- In total, 25,889 rapid diagnostic tests (RDT) have been performed which represents 24.3% coverage.
- 2,651 cultures have been performed which represents 25.4% coverage.
- The last positive culture was on 19 Dec 2017 in Al-Sabeen distric in Amanat Al-Asimah
- 70 districts did not report any suspected case the last three consecutive 3 weeks

Governorate and District level

- At governorate level, the trend from W50-W52 decrease or was stable in all governorates except (Sana'a governorate (+25%), Hajjah governorate (+16%), Sada'a (+17%) .

Trends

- The weekly number of cases is decreasing for the 16 consecutive weeks.
- The weekly proportion of severe cases has significantly decreased representing now 10% of the admitted cases.

Week 52

- 9,169 suspected cases and 4 associated deaths were reported
- 11 % are severe cases
- 740 RDTs were performed, 136 were positive
- 0 Positive culture

A. ملخص المؤشرات Summary indicators



Cholera Response | Cumulative figures from 27/04/2017 to 31/12/2017

1,019,044

حالات الاشتباه
Suspected cases

حالة اشتباه في
الأسبوع الحالي
9,169 suspected cases
in current week

2,237

الوفيات
Associated deaths

حالة وفاة في
الأسبوع الحالي
4 associated deaths
in current week

0.22%

معدل الاماته بين
الحالات
Case Fatality Rate

96%

المحافظات المتأثرة
بالوباء
Governorates
affected

(23 / 22 محافظة)
(22 / 23 governorates)

92%

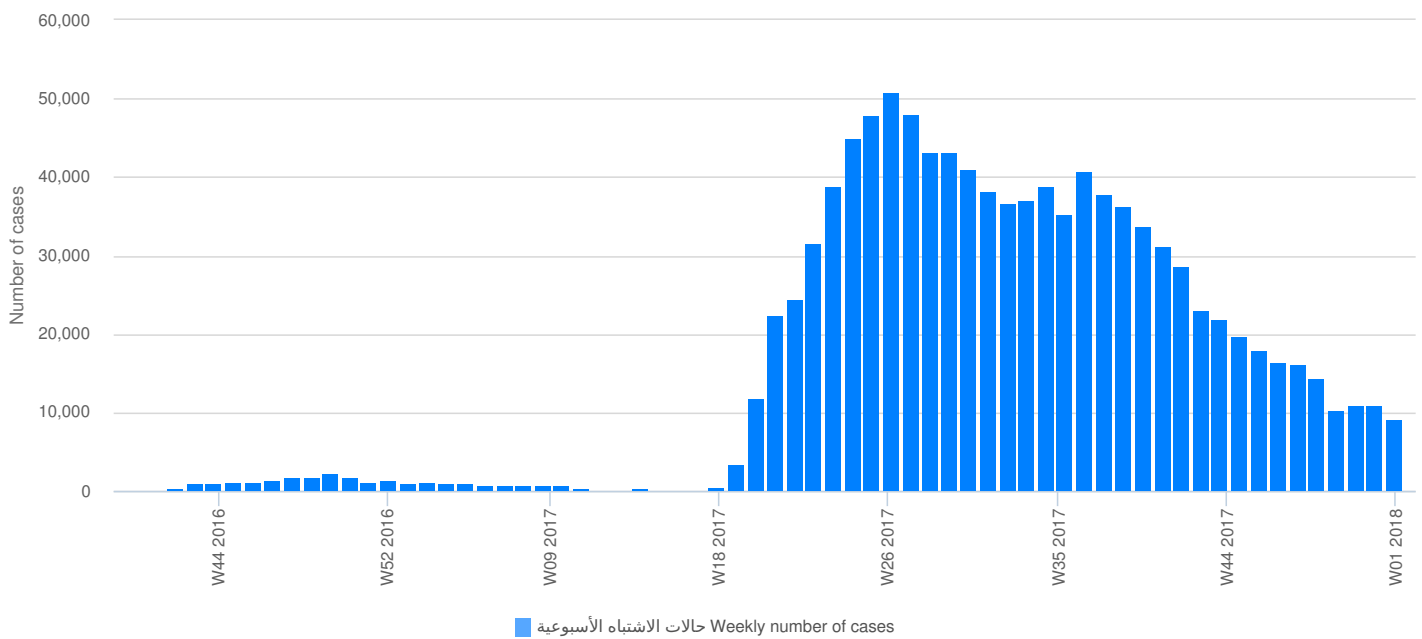
المديريات المتأثرة
بالوباء
Districts
affected

(333 / 305 مديرية)
(305 / 333 districts)

B. المنحنى الوبائي Epidemic curve

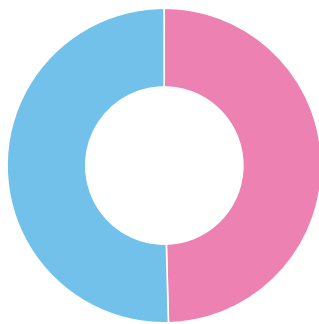
الشكل (1) المنحنى الوبائي على المستوى الوطني

Figure 1 | Epidemic curve (Country)



الشكل (2 أ) حالات الكوليرا على مستوى الجنس

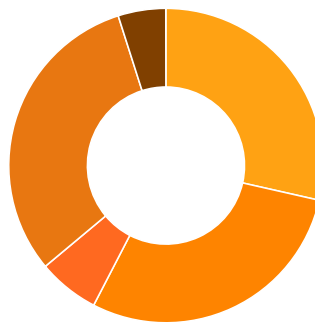
Figure 2a Cases by sex (Cumul.)



Male (50% ; n = 519,247)
Female (50% ; n = 510,269)

الشكل (2 ب) حالات الكوليرا على مستوى الفئات العمرية

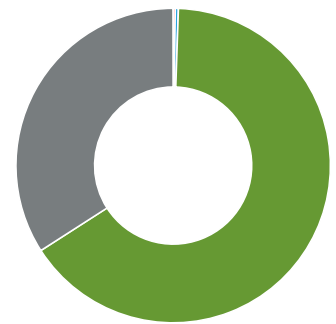
Figure 2b Cases by age (Cumul.)



< 5 (28.6% ; n = 287,803)
5-17 (29.1% ; n = 292,977)
18-44 (31.2% ; n = 314,102)
45-59 (6.3% ; n = 63,849)
≥ 60 (4.9% ; n = 49,515)

الشكل (2 ج) حالات الكوليرا بالنسبة لحالة المريض

Figure 2c Cases by outcome (Cumul.)



Discharged (65.52% ; n = 667,691)
Referred (0.33% ; n = 3,331)
Died (0.22% ; n = 2,237)
Unknown (34.15% ; n = 348,022)

Trends in cases by age distribution and dehydration status

Figure 2d | Trend in proportion of cases aged under 5¹

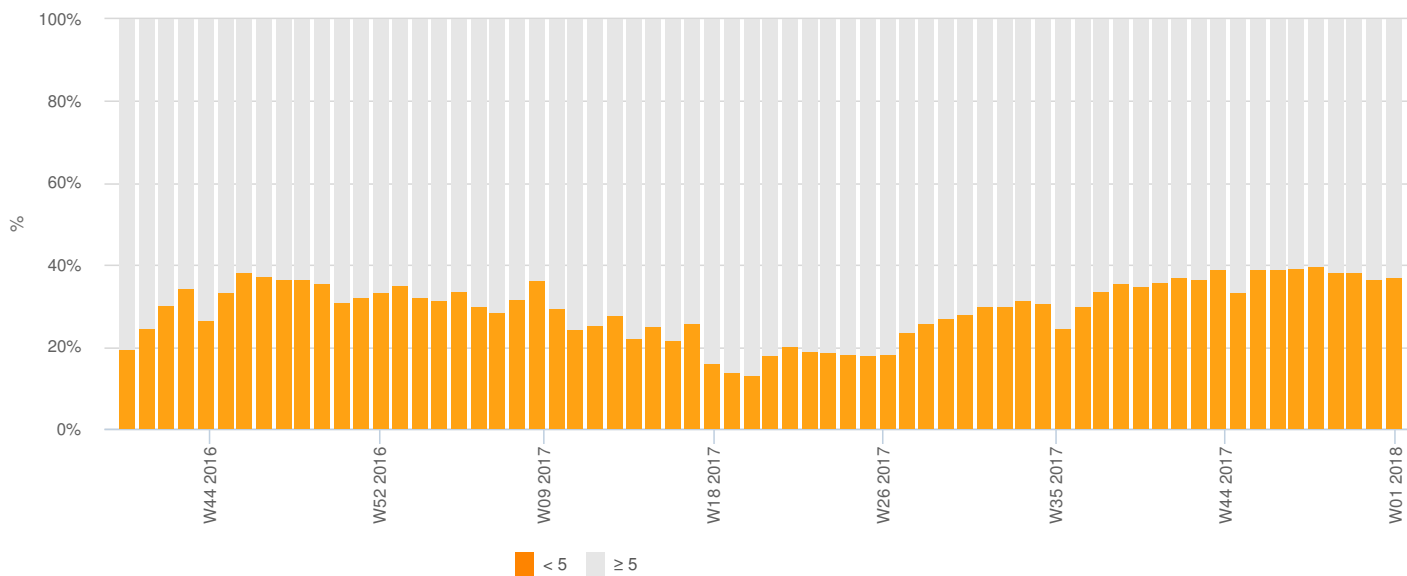
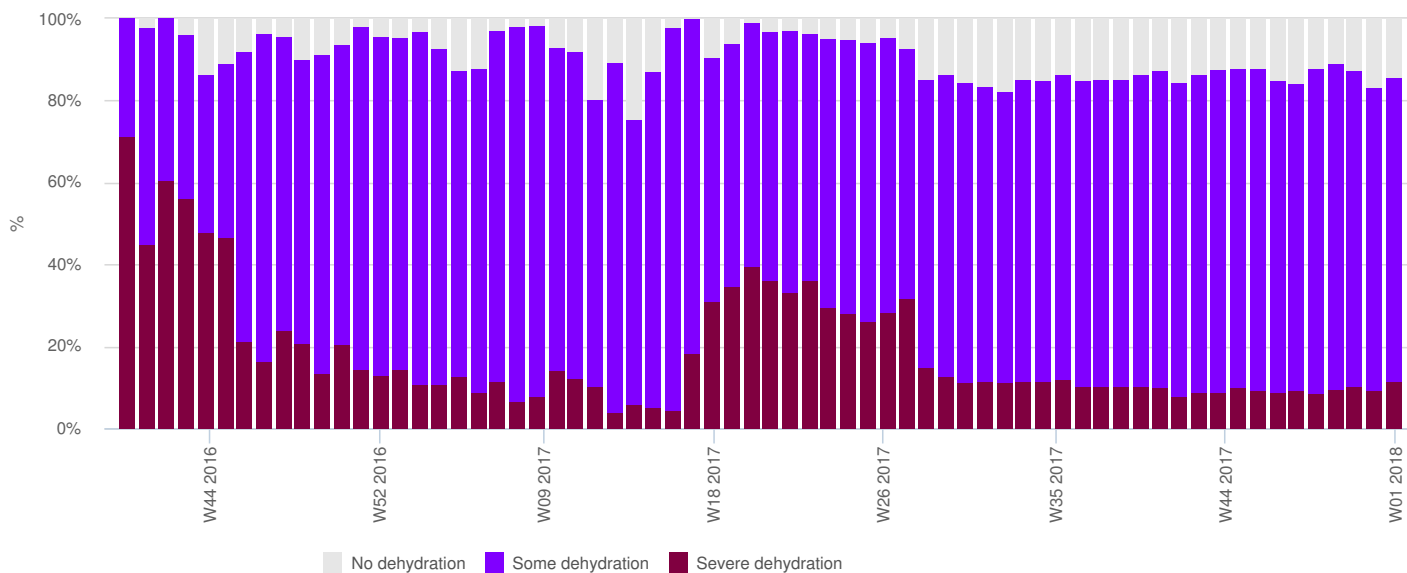


Figure 2e | Trend in proportion of cases by dehydration status¹



¹ Trends in proportional age distribution and dehydration status always add up to 100% and do not give any indication of the number of cases reported. For this reason, these may reflect cases that are not visible in the epidemic curve due to the scale of the y-axis and the huge difference in the case counts between the first and second waves of the outbreak.

C. المحافظة الرئيسية حسب المحافظة Key indicators by governorate

جدول (1) خلاصة بالمؤشرات الرئيسية بالنسبة للمحافظات

Table 1 | Summary of key cholera indicators by Governorate

المحافظات Governorate	تراكمي Cumulative (27/04/2017 to 31/12/2017)					الاتجاه 3 أسابيع 3 week trend				
	حالات الاشتباه Cases	الوفيات Deaths	معدل الامانه CFR ¹	السكان Population	معدل الإصابة AR ²	أسابيع -3 -3W	أسابيع -2 -2W	أسابيع -1 -1W	الأسبوع الحالي W	اتجاه Trend ³
Amran عمران	100,981	174	0.17%	1,160,559	870.11	1,029	1,266	1,146	1,140	► 0%
Al Mahwit المحويت	60,212	149	0.25%	730,209	824.59	726	682	649	560	► -5%
Al Dhale'e الصالح	47,115	81	0.17%	731,496	644.09	21	25	19	6	▼ -12%
Hajjah حجة	116,247	419	0.36%	2,329,741	498.97	1,415	1,467	1,820	1,008	▲ +16%
Abyan أبين	28,241	35	0.12%	570,832	494.73	37	25	11	1	▼ -55%
Sana'a صنعاء	72,300	123	0.17%	1,470,346	491.72	512	778	925	1,043	▲ +25%
Dhamar ذمار	97,741	160	0.16%	2,012,264	485.73	1,280	1,385	1,330	1,339	► 0%
Al Hudaydah الحديدة	149,041	277	0.19%	3,238,199	460.26	1,770	1,818	1,736	1,337	► -2%
Al Bayda البيضاء	27,990	33	0.12%	759,388	368.59	199	260	213	219	► -5%
Amanat Al Asimah العاصمة	98,105	70	0.07%	2,827,824	346.93	1,039	1,263	1,242	1,148	► 5%
Al Jawf الجوف	15,792	22	0.14%	578,585	272.94	214	245	174	127	▼ -18%
Raymah ريمة	15,456	120	0.78%	606,776	254.72	163	194	180	185	► 1%
Aden عدن	20,819	62	0.30%	922,996	225.56	108	91	107	69	► 5%
Lahj لحج	22,669	21	0.09%	1,008,864	224.70	14	13	11	10	▼ -13%
Ibb إب	63,625	286	0.45%	2,957,138	215.16	785	689	590	477	▼ -14%
Taizz تعز	61,631	187	0.30%	2,998,300	205.55	758	560	500	339	▼ -17%
Marib مأرب	7,277	7	0.10%	358,542	202.96	63	74	44	21	▼ -27%
Sa'ada صعدة	10,647	5	0.05%	905,145	117.63	199	107	196	139	▲ +17%
Al Maharah المهرة	1,168	1	0.09%	148,478	78.66	0	1	0	0	▼ -100%
Shabwah شبهوة	1,399	3	0.21%	604,243	23.15	1	0	1	1	▲ +50%
Mokla المكلا	568	2	0.35%	400,788	14.17	0	0	0	0	■ Interrupt
Say'on سينون	20	0	0.00%	219,953	0.91	0	1	0	0	▼ -100%
Yemen اليمن	1,019,044	2,237	0.22%	27,540,666	370.01	10,333	10,944	10,894	9,169	► 2%

¹ معدل الامانه بين الحالات

² معدل الإصابة لكل 10,000 من السكان

³ تم حساب المنحنى بناء على متوسط عدد الحالات خلال ثلاثة أسابيع سابقة

¹ Case Fatality Rate

² Attack Rate (/10,000 population)

³ Trend based on average number of cases in previous 3 weeks:

▲ منحنى مرتفع	غير بمعدل $\geq +10\%$
► منحنى مستقر	غير بمعدل $> -10\%$ to $< +10\%$
▼ منحنى منخفض	غير بمعدل $\leq -10\%$
■ انقطاع في الارسال	عدد 0 حالة خلال 3 أسابيع متتالية

▲ Increased trend	$\geq +10\%$ change
► Stable trend	$> -10\%$ to $< +10\%$ change
▼ Decreased trend	$\leq -10\%$ change
■ Interruption in transmission	0 cases for 3 consecutive weeks

D. Laboratory

Figure 4 | RDT results by week

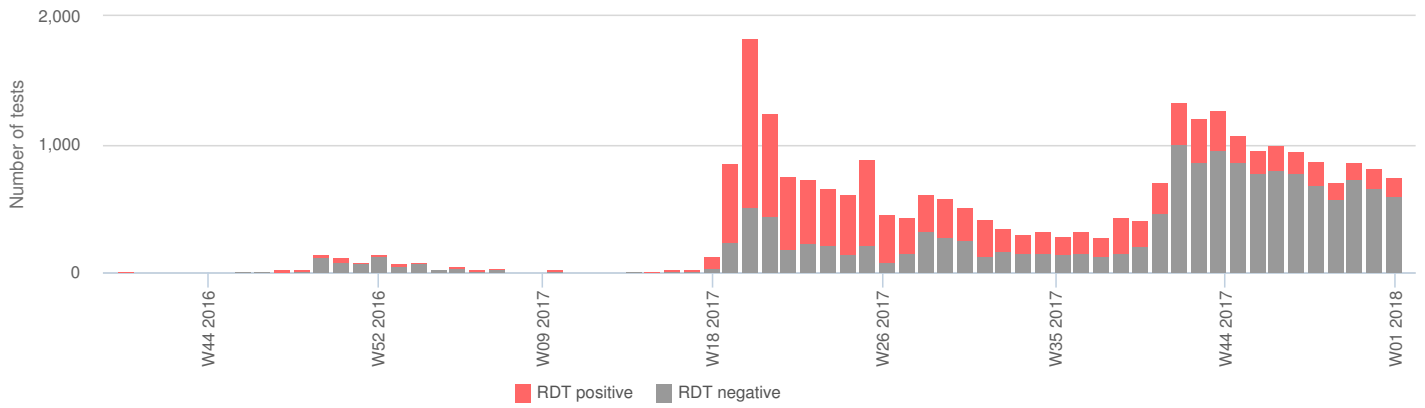
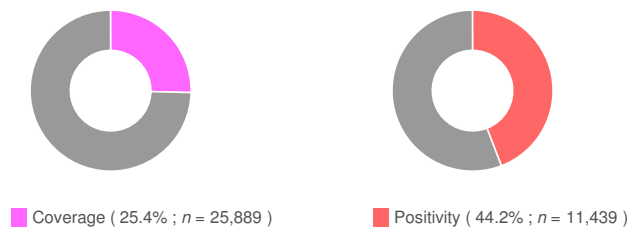
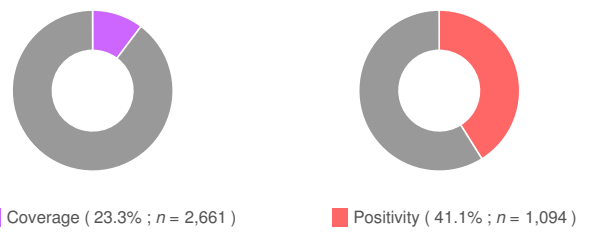


Figure 5 | Rapid Diagnostic Kit (RDT)



*Coverage of RDT is calculated based on (10% of the suspected cases)

Figure 6 | Culture



*Coverage of culture is calculated based on (Number of culture performed/Number of positive RDT)

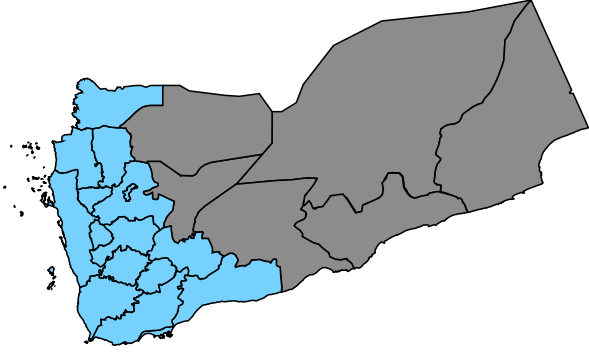
Table 2 | Summary of key laboratory indicators by Governorate

Governorate	Rapid Diagnostic Kit (RDT)					Culture			
	Cases	Total tested	Coverage	Total +ve	+ivity rate	Total tested	Coverage	Total +ve	+ivity rate
أبين أبين	28,241	238	8.4%	151	63.4%	39	25.8%	23	59.0%
عدن عدن	20,819	568	27.3%	358	63.0%	173	48.3%	118	68.2%
البيضاء البيضاء	27,990	1682	60.1%	763	45.4%	194	25.4%	9	4.6%
الضالع الضالع	47,115	328	7.0%	120	36.6%	41	34.2%	3	7.3%
الحديدة الحديدة	149,041	2641	17.7%	963	36.5%	392	40.7%	227	57.9%
الجوف الجوف	15,792	1283	81.2%	886	69.1%	48	5.4%	12	25.0%
المهرة المهرة	1,168	263	225.2%	118	44.9%	25	21.2%	14	56.0%
المحويت المحويت	60,212	1776	29.5%	902	50.8%	53	5.9%	12	22.6%
أمانة العاصمة أمانة العاصمة	98,105	4619	47.1%	2010	43.5%	488	24.3%	187	38.3%
عمران عمران	100,981	1711	16.9%	614	35.9%	89	14.5%	23	25.8%
ذمار ذمار	97,741	2185	22.4%	331	15.1%	109	32.9%	23	21.1%
حجة حجة	116,247	752	6.5%	173	23.0%	45	26.0%	14	31.1%
إب إب	63,625	634	10.0%	430	67.8%	98	22.8%	13	13.3%
لحج لحج	22,669	1137	50.2%	577	50.7%	38	6.6%	12	31.6%
مأرب مأرب	7,277	192	26.4%	124	64.6%	2	1.6%	0	0.0%
المكلا المكلا	568	105	184.9%	80	76.2%	55	68.8%	32	58.2%
ريمة ريمة	15,456	579	37.5%	383	66.1%	32	8.4%	5	15.6%
صعدة صعدة	10,647	919	86.3%	752	81.8%	12	1.6%	0	0.0%
صنعاة صنعاة	72,300	2818	39.0%	706	25.1%	264	37.4%	44	16.7%
سنيون سنيون	20	19	950.0%	9	47.4%	11	122.2%	0	0.0%
شبابوة شبابوة	1,399	127	90.8%	53	41.7%	51	96.2%	9	17.6%
تعز تعز	61,631	1313	21.3%	936	71.3%	402	42.9%	314	78.1%
اليمن اليمن	1,019,044	25,889	25.4%	11,439	44.2%	2,661	23.3%	1,094	41.1%

E. التوزيع الجغرافي مع مرور الوقت Geographic distribution over time

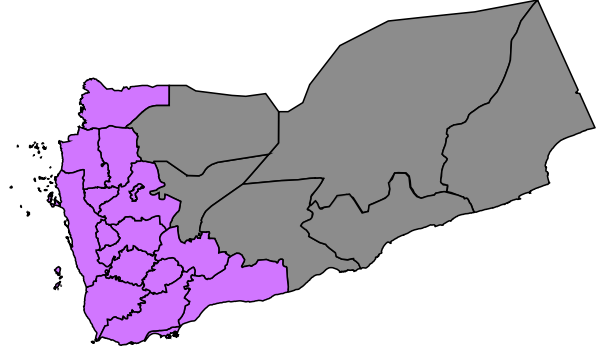
الخريطة (أ 1) عدد حالات الاشتباه للمحافظات

Map 1a | Number of cases by governorate (Jan 2017 - Apr 2017)



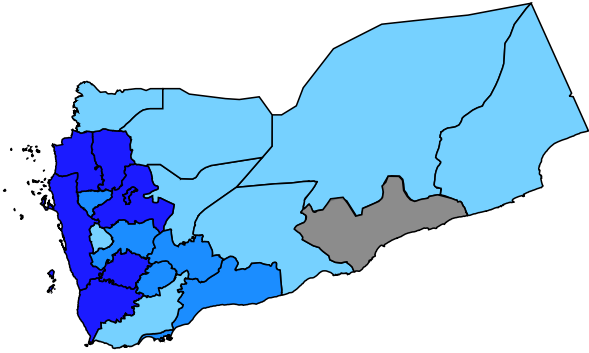
الخريطة (ب 1) معدل الإصابة للمحافظات

Map 1b | Attack rate by governorate (Jan 2017 - Apr 2017)



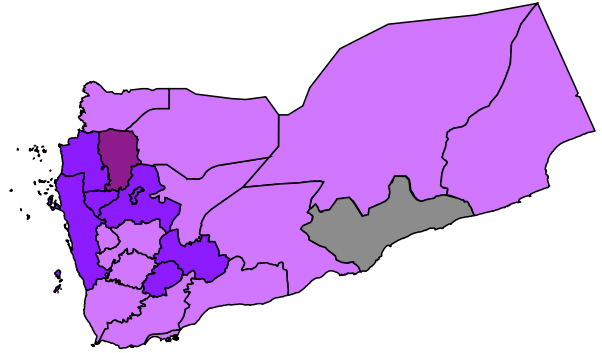
الخريطة (أ 1) عدد حالات الاشتباه للمحافظات

Map 1c | Number of cases by governorate (Jan 2017 - Jun 2017)



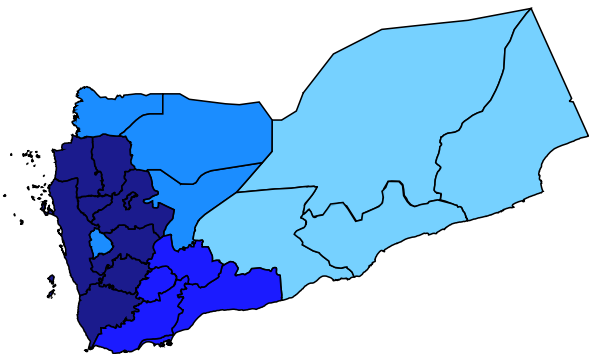
الخريطة (ب 1) معدل الإصابة للمحافظات

Map 1d | Attack rate by governorate (Jan 2017 - Jun 2017)



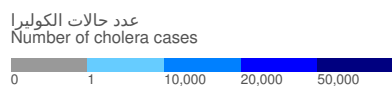
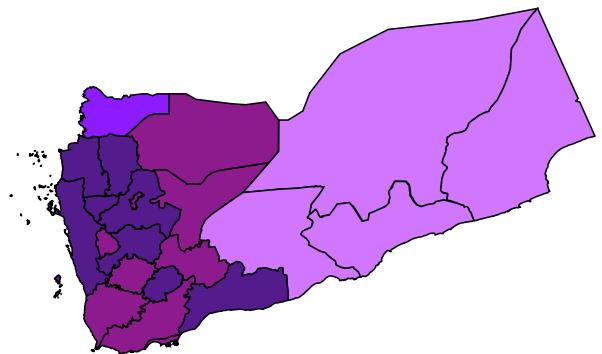
الخريطة (أ 1) عدد حالات الاشتباه للمحافظات

Map 1e | Number of cases by governorate (Jan 2017 - present)



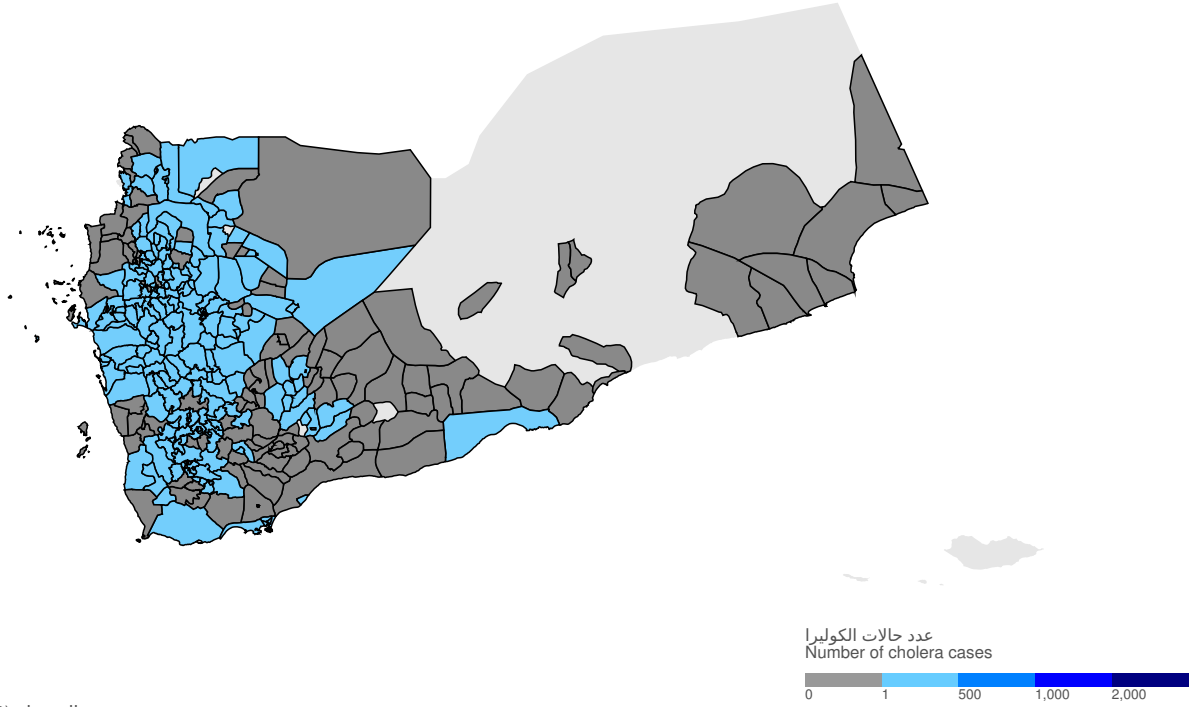
الخريطة (ب 1) معدل الإصابة للمحافظات

Map 1f | Attack rate by governorate (Jan 2017 - present)

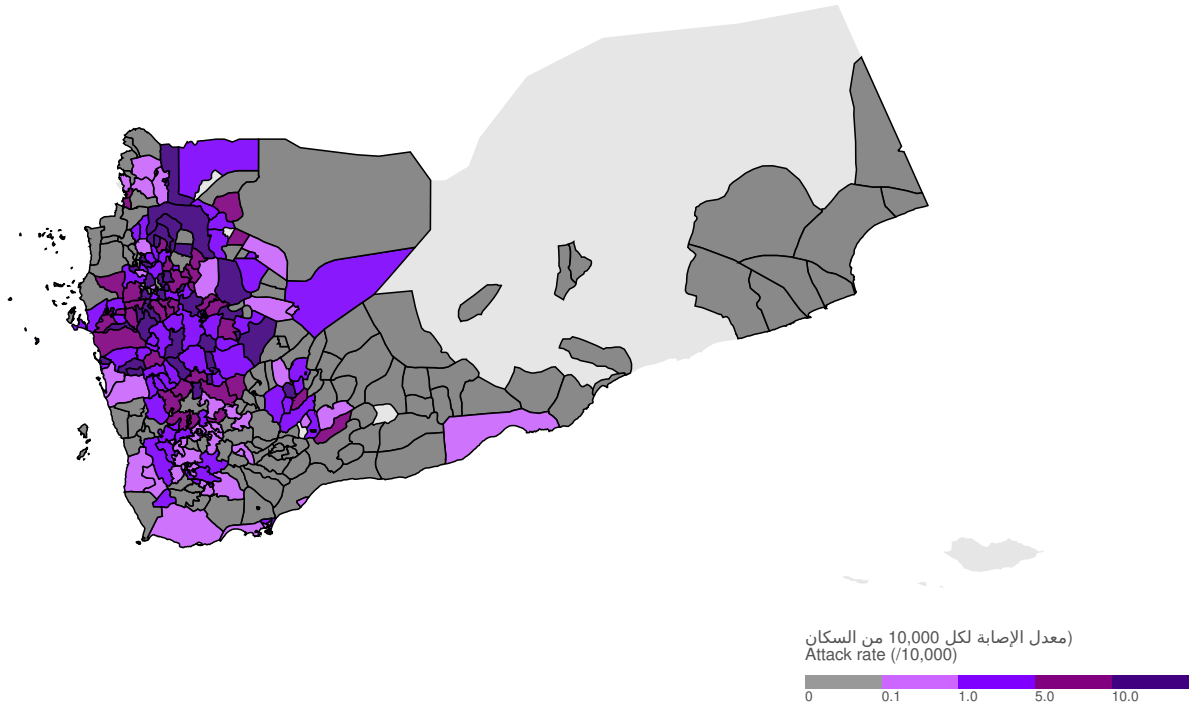


F. المديريات ذات الأولوية Districts reporting in current week

الخريطة (2 أ) عدد حالات الاشتباه الأولوية
Map 2 | Number of cases by district (W52 2017)



الخريطة (3 ب) معدل الإصابة الأولوية
Map 3 | Attack rate by district (W52 2017)



G. Epidemic curves by Governorate حسب المحافظة

Figure 3a | أبين Abyan

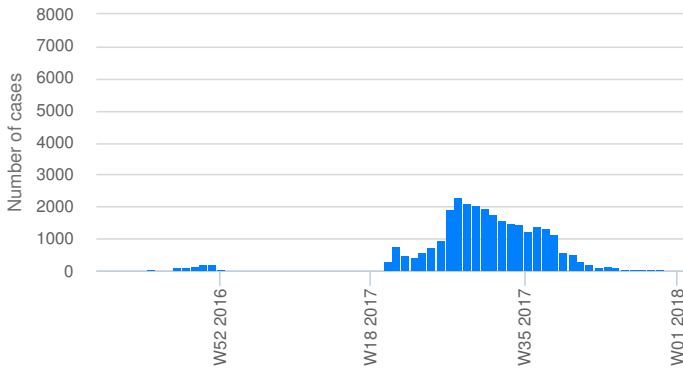


Figure 3b | عدن Aden

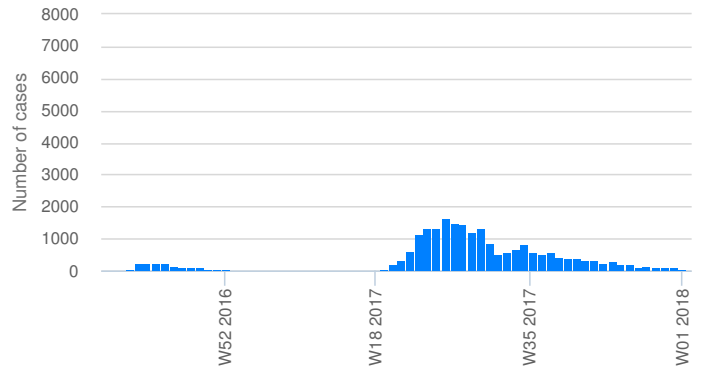


Figure 3c | البيضاء Al Bayda

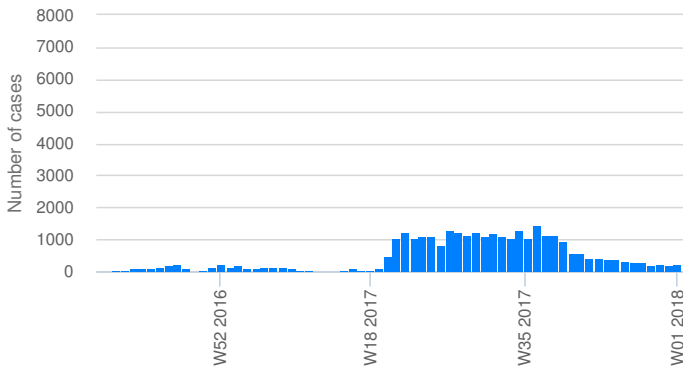


Figure 3d | الصالحه Al Dhale'e

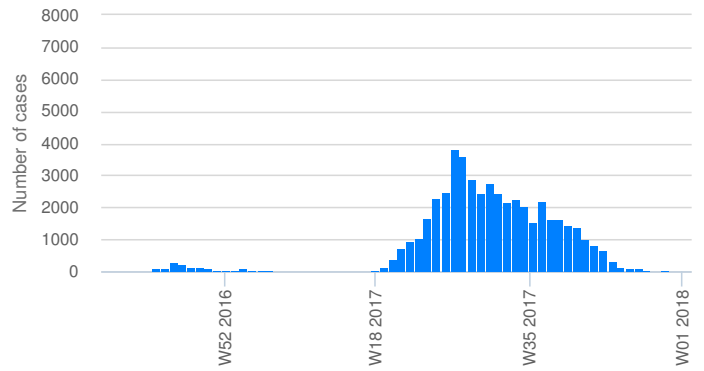


Figure 3e | الحديدة Al Hudaydah

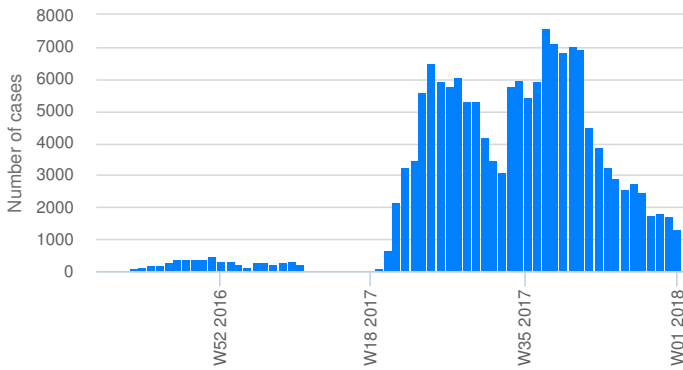


Figure 3f | الجوف Al Jawf

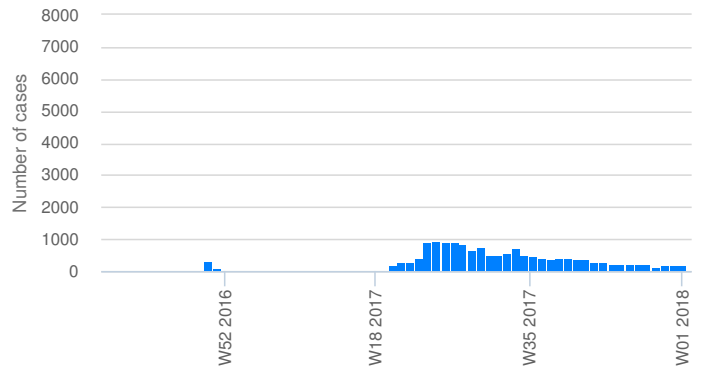


Figure 3g | المهرة Al Maharah

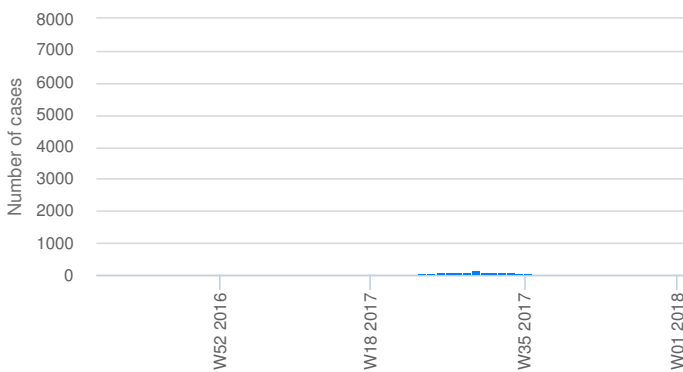


Figure 3h | المحويت Al Mahwit

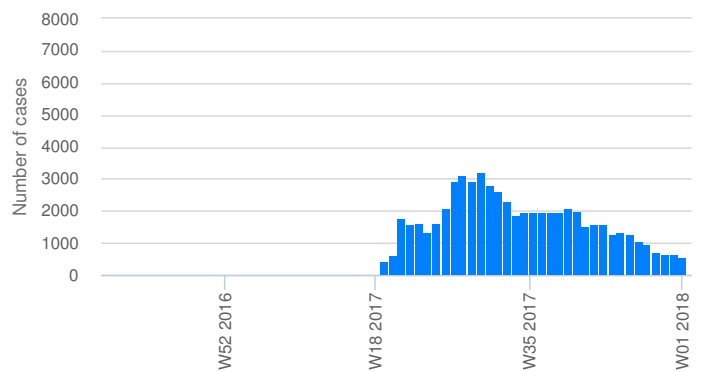


Figure 3i | Amanat Al Asimah أمانة العاصمة

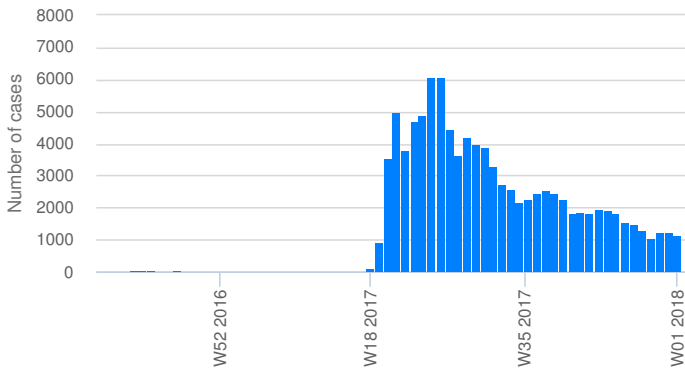


Figure 3j | Amran عمران

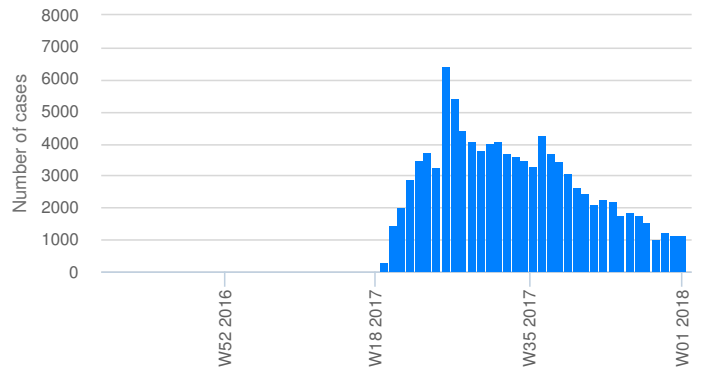


Figure 3k | Dhamar ذمار

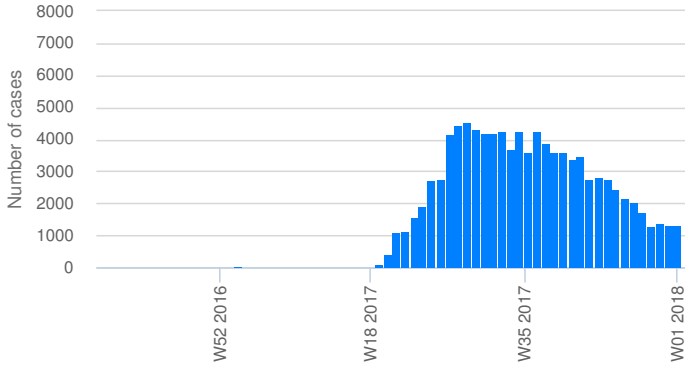


Figure 3l | Hajjah حجة

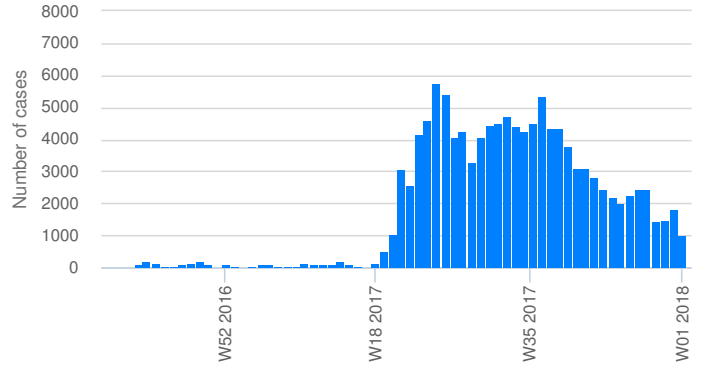


Figure 3m | Ibb إب

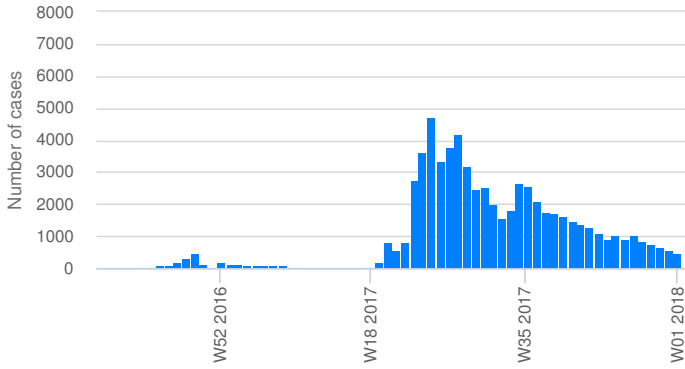


Figure 3n | Lahj لبح

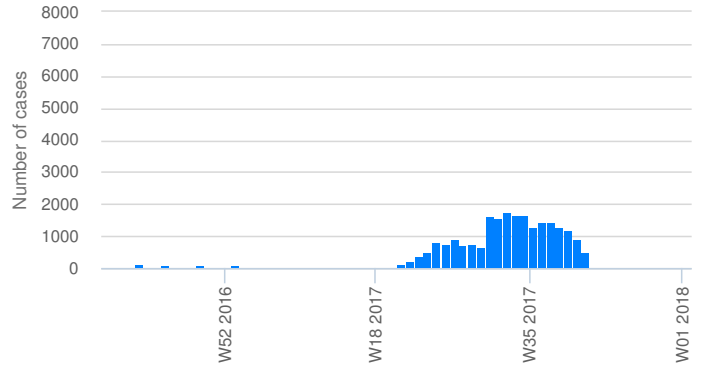


Figure 3o | Marib مأرب

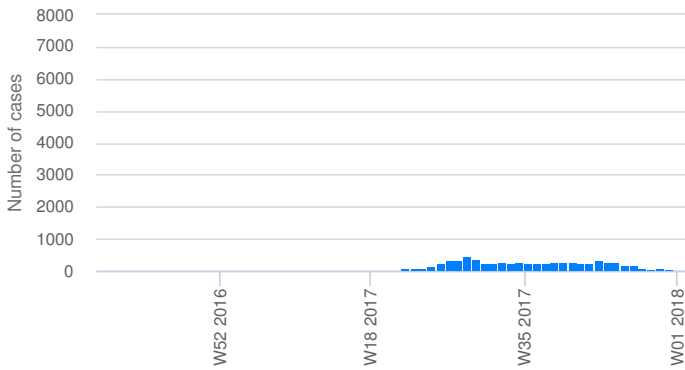


Figure 3p | Raymah ريمة

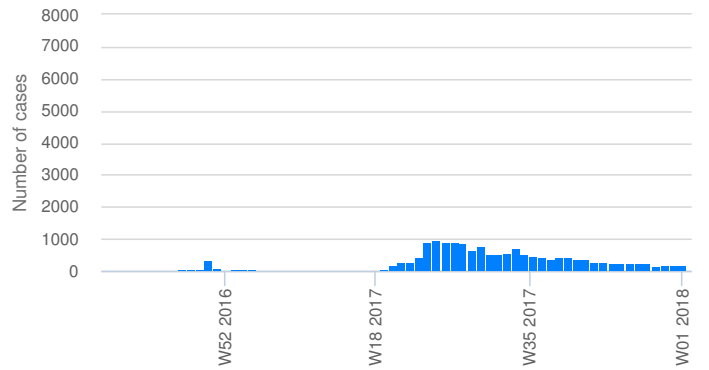


Figure 3q | Sa'ada صعدة

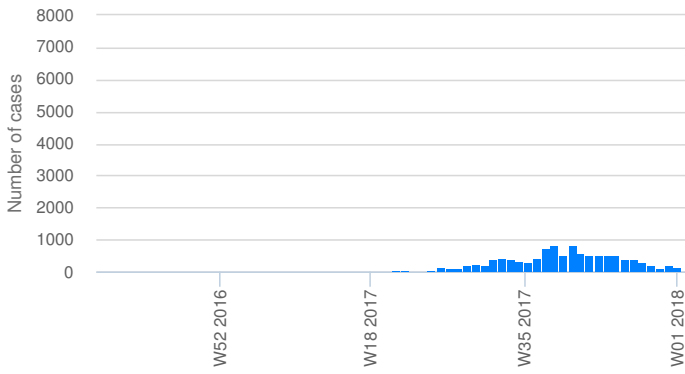


Figure 3r | Sana'a صنعاء

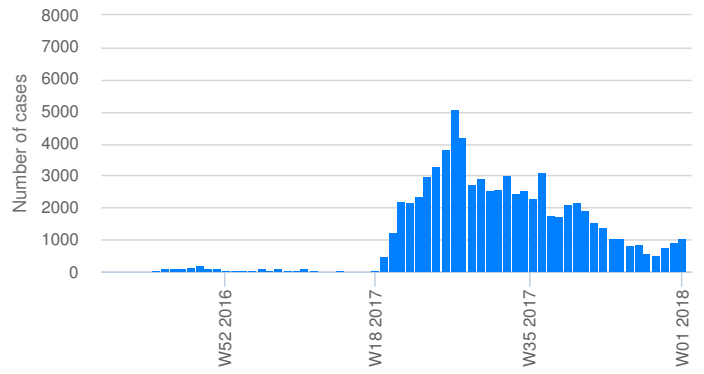


Figure 3s | Say'on سيئون

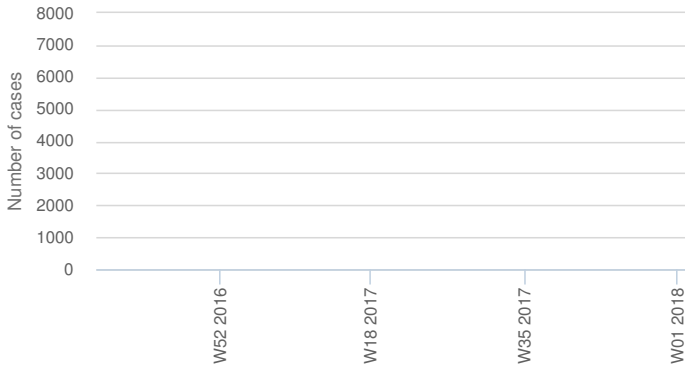


Figure 3t | Shabwah شبوة

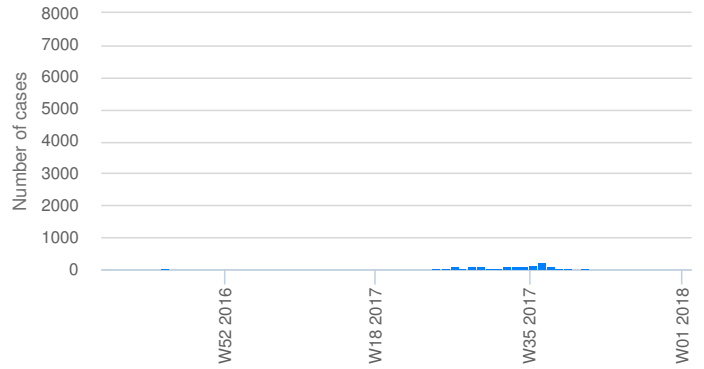
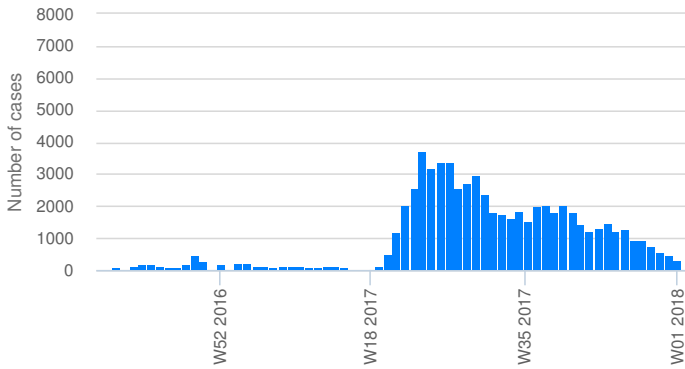


Figure 3v | Taizz تعز



للتواصل
Contact Information

Dr Reema Al Yusfi
eDEWS National Coordinator
Ministry of Public Health and Population
Sana'a, Yemen
Email: alyusfi@yahoo.com

Malika Bouhenia
Epidemiologist
WHO Country Office
Sana'a, Yemen
Email: bouheniam@who.int

Sadeq Al-Wesabi
Communications Officer
WHO Country Office
Sana'a, Yemen
Email: hasansa@who.int



Learn more about the project:
<http://ewars-project.org>

Yemen Cholera Response Portal

has been deployed since July 2017 to strengthen surveillance in response to the cholera outbreak in Yemen. <http://ye.ewars.ws/login>

النافذة الخاصة بالاستجابة لوباء

الكوليرا في اليمن

تم النشر بتاريخ يوليو 2017 لتعزيز الترصد والاستجابة لوباء الكوليرا في اليمن
<http://ye.ewars.ws/login>



World Health
Organization