



اليمن Yemen

الاستجابة للكوليرا Cholera Response

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

النشرة الوبائية الأسبوعية
Weekly Epidemiological Bulletin
W17 2018 (Apr 23-Apr 29)

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Highlights

Cumulative figures

- The cumulative total from 27 April 2017 to 29 April 2018 is 1,094,061 suspected cholera cases and 2,277 associated deaths, (CFR 0.21%), 1115 have been confirmed by culture.
- The total proportion of severe cases among the suspected cases is 15.2%
- The national attack rate is 390.1 per 10,000. The five governorates with the highest cumulative attack rates per 10,000 remain Amran (909), Al Mahwit (885), Al Dhale'e (639), Sana'a (529) and Dhamar (529).
- Children under 5 years old represent 28.8% of total suspected cases.
- In total, 46,573 rapid diagnostic tests (RDT).
- 3,535 cultures have been performed which represents 24% coverage.
- The last positive culture was on 3 April 2018 in Ma'ain district in Amanat Al Asimah
- Since 1st of Jan 2018 the districts with highest cumulative suspected cases are Al Hali (4767), Radman Al Awad (1,906), Al Sabaeen (1,850), Maqbanah (1,840), Al Mighlaf (1,619)
- 144 districts are still reporting suspected cholera cases since last 3 weeks
- 161 districts (out of 305 affected districts) did not report any suspected cases for the last three consecutive weeks

Governorate and District level

- At governorate level, the trend from W14 –W16 decrease or was stable in all governorates, except Amran +11%, Sana'a +19%, Raymeh +28, Taiz +18%.

Trends

- The trend of weekly number of cases is decreasing since week 36.
- The weekly proportion of severe cases has significantly decreased (now 14%).

Week 17 2018

- 1,678 suspected cases and 1 associated deaths were reported
- The districts reporting the highest number of cases are Al Hali (90), Radman Al Awad (81), Al Mighlaf (71). Ma'ain (68),
- 14 % are severe cases
- 1,678 RDTs were performed, 151 were positive
- no culture results received this week

A. ملخص المؤشرات Summary indicators



Cholera Response | Cumulative figures from 27/04/2017 to 29/4/2018

1,094,061

حالات الاشتباه
Suspected cases

حالة اشتباه في
الأسبوع الحالي
1,678 suspected cases
in current week

2,277

الوفيات
Associated deaths

حالة وفاة في
الأسبوع الحالي
1 associated deaths
in current week

0.21%

معدل الإماتة بين الحالات
Case Fatality Rate

96%

المحافظات المتأثرة بالوباء
Governorates
affected

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

92%

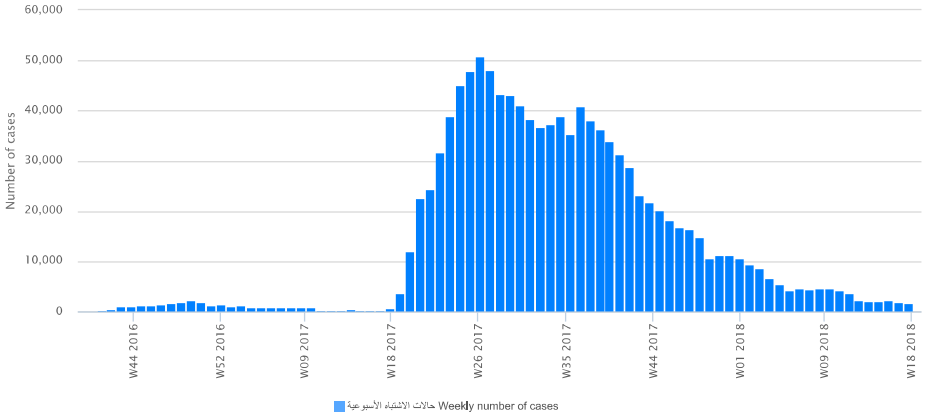
المديريات المتأثرة بالوباء
Districts
affected

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

B. المنحنى الوبائي Epidemic curve

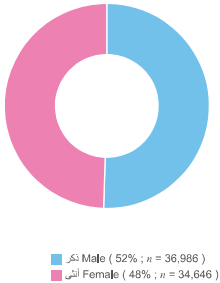
الشكل (1) المنحنى الوبائي على المستوى الوطني

Figure 1 | Epidemic curve (Country)



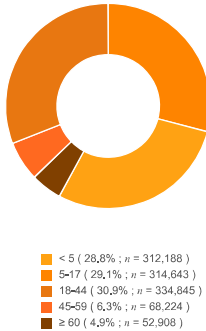
الشكل (2) حالات الكوليرا على مستوى الجنس

Figure 2a Cases by sex (Cumul.)



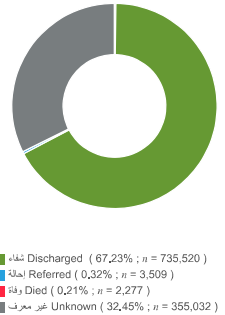
الشكل (ب) حالات الكوليرا على مستوى الفئات العمرية

Figure 2b Cases by age (Cumul.)



الشكل (ج) حالات الكوليرا بالنسبة لحالة المريض

Figure 2c Cases by outcome (Cumul.)



Trends in cases by age distribution and dehydration status

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

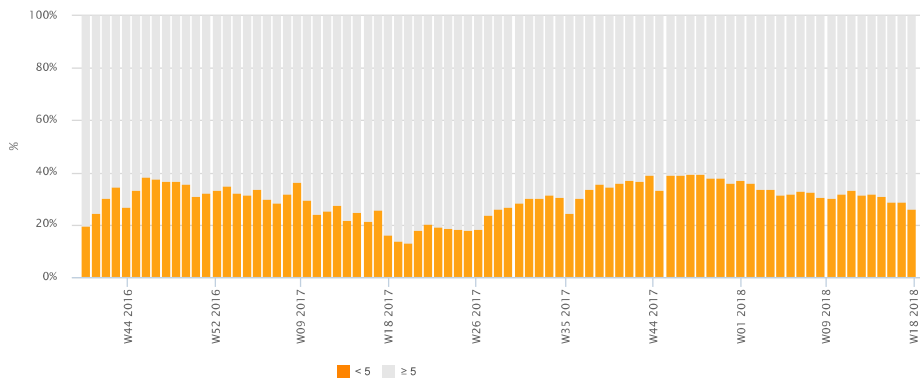
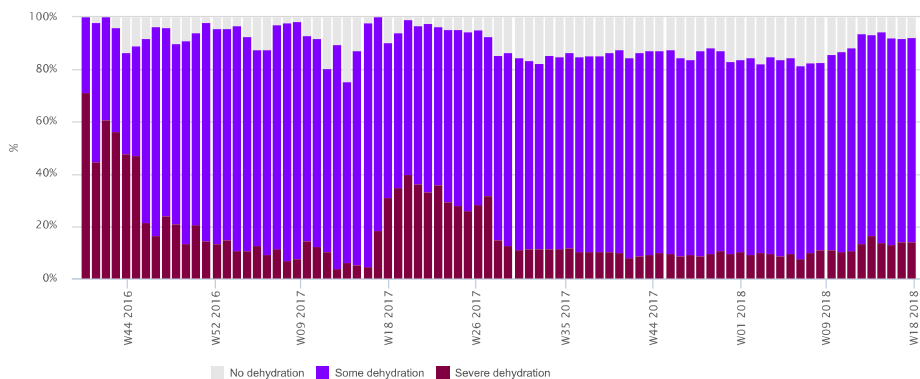


Figure 2e | Trend in proportion of cases by dehydration status¹



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. Key indicators by governorate

جدول (1) خلاصة بالموشرات الرئيسية بالنسبة للمحافظات

Table 1 | Summary of key cholera indicators by Governorate

المحافظة Governorate	تراكمي Cumulative (27/04/2017 to 29/4/2018)		الاجداد 3 اسابيع 3 week trend			الأسبوع الحالي W	الاتجاه Trend ³			
	حالات الإصابة Cases	الوفيات Deaths	معدل الإصابة CFR ¹	السكان Population	معدل الإصابة AR ²					
عمران Amran	105,893	181	0.17%	1,164,723	909.17	165	170	197	206	▲ +11%
الماهوليت المعوت Al Mahwit	65,224	151	0.23%	736,649	885.54	139	159	106	175	▼ -21%
الضالع Al Dhale'e	47,178	82	0.17%	738,550	638.79	3	3	6	7	▲ +50%
صنعاء Sana'a	78,386	123	0.16%	1,479,045	529.98	107	76	120	126	▲ +19%
ذمار Dhamar	107,503	163	0.15%	2,029,030	529.82	329	323	176	308	▼ -36%
حجة Hajjah	121,361	423	0.35%	2,365,927	512.95	12	3	6	4	▼ -14%
الحديدة الحديدة Al Hudaydah	160,596	284	0.18%	3,263,094	492.16	395	477	417	271	► -3%
أبين Abyan	28,243	35	0.12%	574,813	491.34	0	0	0	0	■ Interrupt
البيضاء Al Bayda	34,266	38	0.11%	762,907	449.15	424	402	279	199	▼ -24%
أمانة العماسمة Ammanat Al Asimah	107,971	72	0.07%	2,871,534	376.00	266	319	255	220	► -9%
ريمة Raymah	18,672	120	0.64%	611,693	305.25	18	25	32	22	▲ +28%
الجوف Al Jawf	16,172	22	0.14%	582,028	277.86	0	0	0	11	■ Interrupt
لحج Lahj	24,344	22	0.09%	1,015,039	239.83	0	0	0	0	■ Interrupt
إب Ibb	69,929	291	0.42%	2,976,340	234.95	77	74	82	64	► 6%
عدن Aden	20,993	62	0.30%	933,268	224.94	0	0	0	0	■ Interrupt
تعز Taizz	66,162	190	0.29%	3,016,879	219.31	74	96	110	65	▲ +18%
مأرب Marib	7,296	7	0.10%	361,772	201.67	0	0	0	0	■ Interrupt
صعدة Sa'ada	10,712	5	0.05%	920,982	116.31	0	0	0	0	■ Interrupt
المهرة Al Maharah	1,169	1	0.09%	150,370	77.74	0	0	0	0	■ Interrupt
شبابوة Shabwah	1,399	3	0.21%	608,484	22.99	0	0	0	0	■ Interrupt
المكلا Mokla	568	2	0.35%	444,713	12.77	0	0	0	0	■ Interrupt
سيئون Say'on	24	0	0.00%	379,571	0.63	0	0	0	0	■ Interrupt
اليمن Yeman	1,094,061	2,277	0.21%	27,987,313	390.91	2,009	2,127	1,786	1,678	▼ -10%

¹ معدل الإماتة بين الحالات

² معدل الإصابة لكل 10,000 من السكان

³ تم حساب الاتجاه بناء على متوسط عدد الحالات خلال ثلاثة أسابيع سابقة (أو لم يتم تعيين الاتجاه الحالي في حساب الاتجاهي بسبب عدم اكتمال البيانات)

¹ Case Fatality Rate

² Attack Rate (/10,000 population)

³ Trend based on average number of cases in previous 3 weeks (current week excluded due to incomplete data)

▲ متزايد	غير معمل $\geq +10\%$
► مستقر	غير معمل $> -10\%$ to $< +10\%$
▼ منخفض	غير معمل $\leq -10\%$
■ انقطاع في الإرسال	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

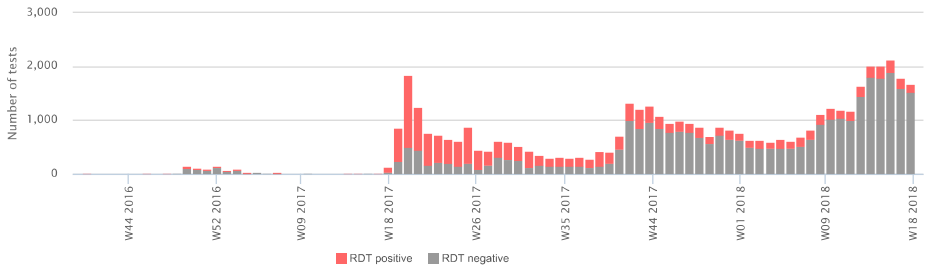


Figure 5 | Rapid Diagnostic Kit (RDT)

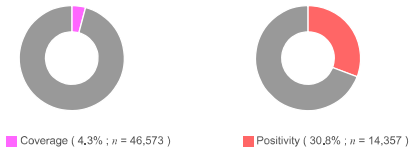
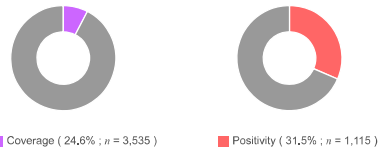


Figure 6 | Culture



*Coverage of RDT is calculated based on (Number of RDT performed/Number of suspected cases)

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

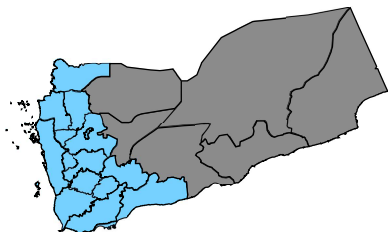
Table 2 | Summary of key laboratory indicators by Governorate

Governorate	Rapid Diagnostic Kit (RDT)					Culture			
	Cases	Total tested	Coverage	Total +ve	+vity rate	Total tested	Coverage	Total +ve	+vity rate
Abyan أبين	28,243	239	8,5%	152	63,6%	39	25,7%	23	59,0%
Aden عدن	20,993	587	28,0%	366	62,4%	173	47,3%	118	68,2%
Al Bayda البيضا	34,266	4240	123,7%	1039	24,5%	278	26,8%	9	3,2%
Al Dhale'e الضالع	47,178	388	8,2%	135	34,8%	44	32,6%	3	6,8%
Al Hudaydah الحديدة	160,596	7159	44,6%	1598	22,3%	549	34,4%	235	42,8%
Al Jawf الجوف	16,172	1536	95,0%	924	60,2%	72	7,8%	12	16,7%
Al Maharah المحرة	1,169	264	225,8%	119	45,1%	25	21,0%	14	56,0%
Al Mahwit المحويت	65,224	3055	46,8%	1130	37,0%	161	14,2%	13	8,1%
Amanat Al Asimahمانة العاصمة	107,971	8203	76,0%	2597	31,7%	711	27,4%	192	27,0%
Amran عمران	105,893	3579	33,8%	876	24,5%	172	19,6%	23	13,4%
Dhamar ذمار	107,503	5934	55,2%	587	9,9%	164	27,9%	23	14,0%
Hajjah حجة	121,361	838	6,9%	205	24,5%	65	31,7%	14	21,5%
Ibb إب	69,929	1251	17,9%	593	47,4%	122	20,6%	13	10,7%
Lahj لحج	24,344	1160	47,7%	588	50,7%	44	7,5%	18	40,9%
Marib مأرب	7,296	197	27,0%	128	65,0%	2	1,6%	0	0,0%
Mokla المكلا	568	105	184,9%	80	76,2%	55	68,8%	32	58,2%
Raymah ريمة	18,672	773	41,4%	422	54,6%	47	11,1%	5	10,6%
Sa'ada صنعاء	10,712	921	86,0%	752	81,7%	12	1,6%	0	0,0%
Sana'a صنعاء	78,386	4127	52,6%	939	22,8%	334	35,6%	45	13,5%
Say'on سيئون	24	23	958,3%	9	39,1%	12	133,3%	0	0,0%
Shabwah شبوة	1,399	127	90,8%	53	41,7%	51	96,2%	9	17,6%
Taizz تعز	66,162	1867	28,2%	1065	57,0%	403	37,8%	314	77,9%
Yemen اليمن	1,094,061	46,573	42,6%	14,357	30,8%	3,535	24,6%	1,115	31,5%

E. التوزيع الجغرافي مع مرور الوقت Geographic distribution over time

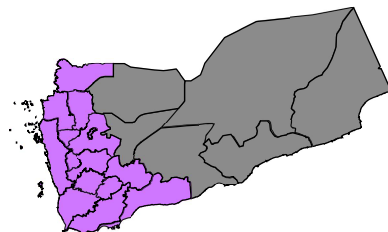
الخريطة (1 أ) عدد حالات الإسهال للمحافظات

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



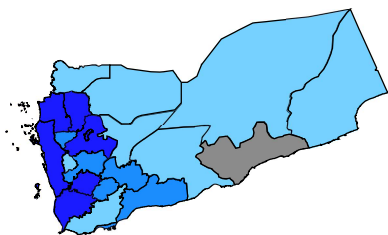
الخريطة (1 ب) معدل الإصابة للمحافظات

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



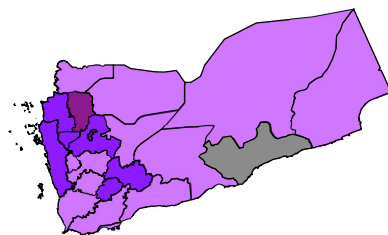
الخريطة (1 ج) عدد حالات الإسهال للمحافظات

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



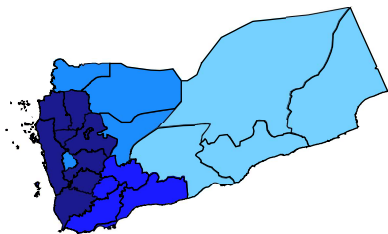
الخريطة (1 د) معدل الإصابة للمحافظات

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



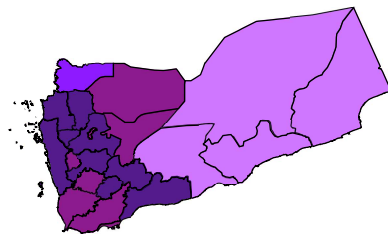
الخريطة (1 هـ) عدد حالات الإسهال للمحافظات

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



الخريطة (1 و) معدل الإصابة للمحافظات

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



عدد حالات الكوليرا
Number of cholera cases



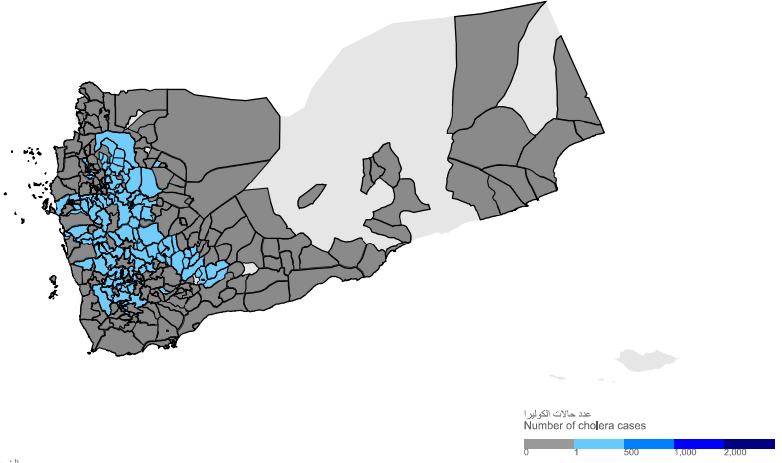
معدل الإصابة لكل 10,000 من السكان
Attack rate (/10,000)



F. المديرية ذات الأولوية Districts reporting in current week

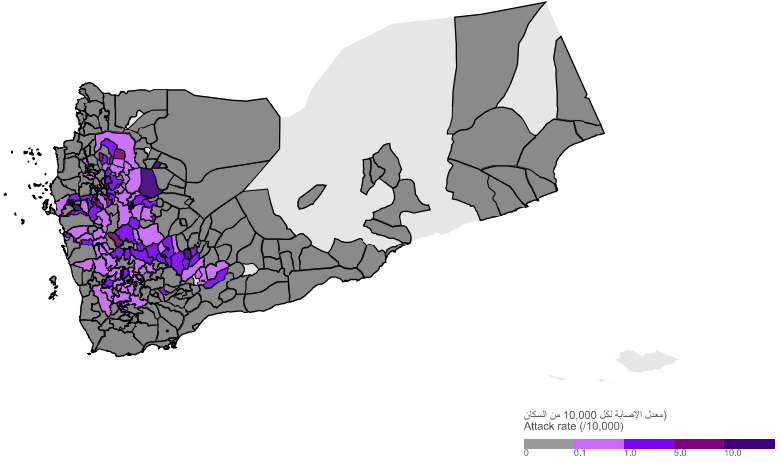
الخريطة (12) عدد حالات الاصابة الوبائية

Map 2 | Number of cases by district (W17 2018)



الخريطة (3) معدل الإصابة الوبائية

Map 3 | Attack rate by district (W17 2018)



G. Epidemic curves by Governorate المنحنى الوبائي حسب المحافظة

Figure 3a | Abyan أبين

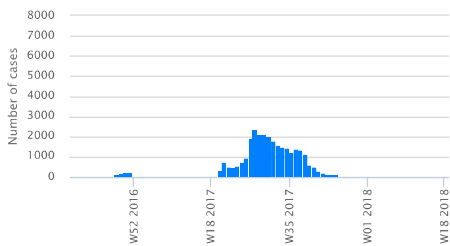


Figure 3b | Aden عدن

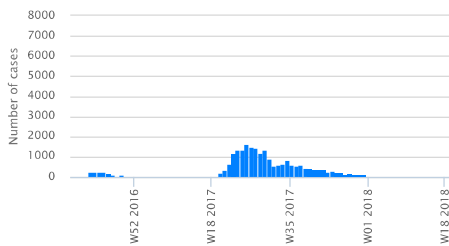


Figure 3c | Al Bayda البيضاء

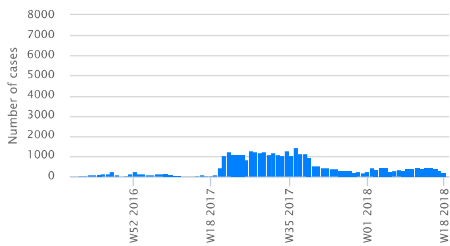


Figure 3d | Al Dhale'e الضالع

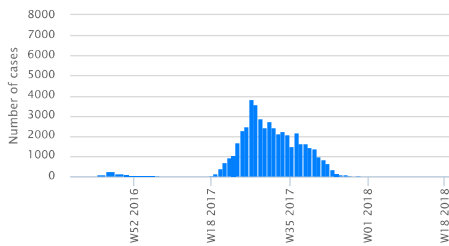


Figure 3e | Al Hudaydah الحديدة

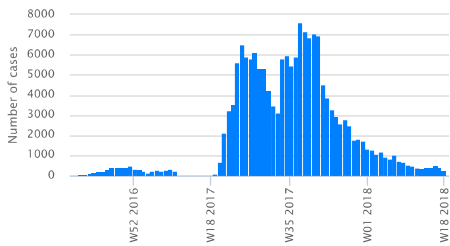


Figure 3f | Al Jawf الجوف

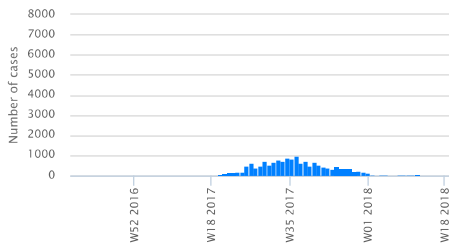


Figure 3g | Al Maharah المهرة

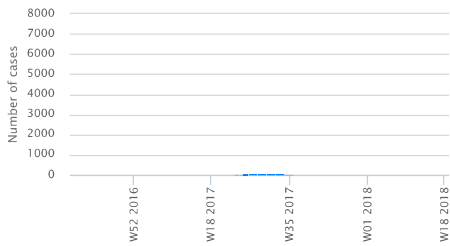


Figure 3h | Al Mahwit المحويت

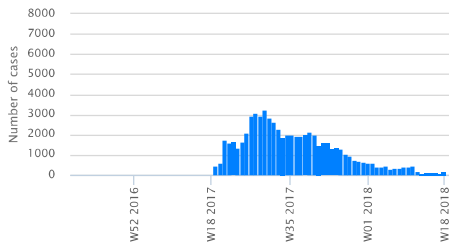


Figure 3i | Amanat Al Asimah أمانة العاصمة

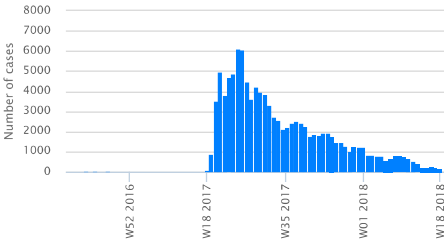


Figure 3j | Amran عمران

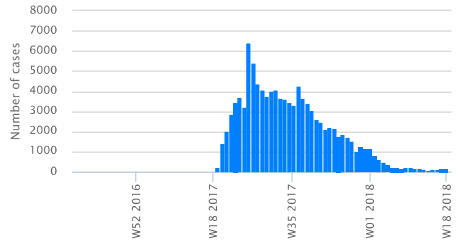


Figure 3k | Dhamar ذمار

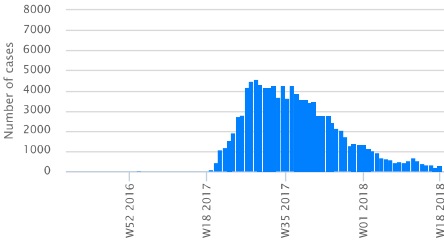


Figure 3l | Hajjah حجة

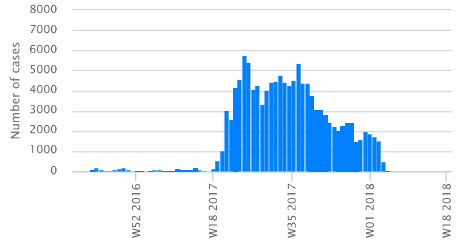


Figure 3m | Ibb إب

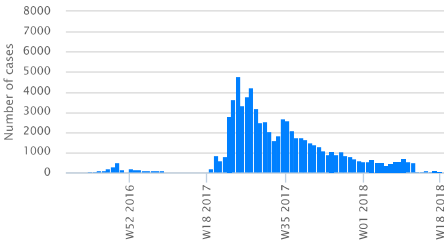


Figure 3n | Lahj لحج

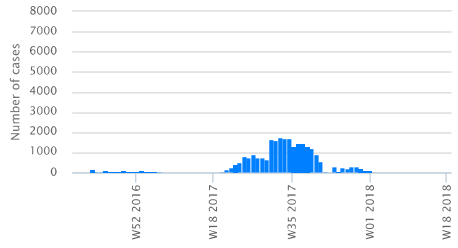


Figure 3o | Marib مأرب

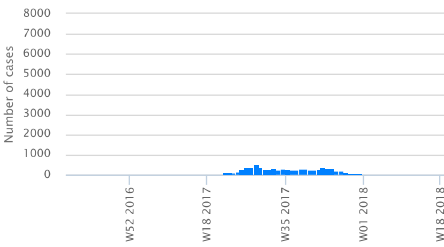


Figure 3p | Raymah ريمة

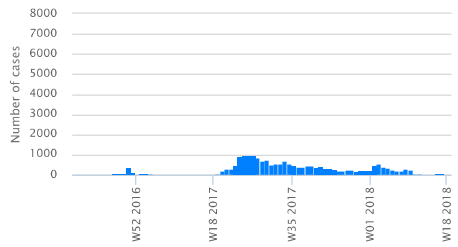


Figure 3q | Sa'ada صنعاء

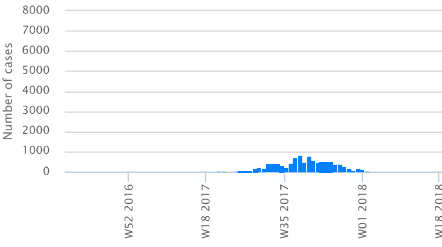


Figure 3r | Sana'a صنعاء

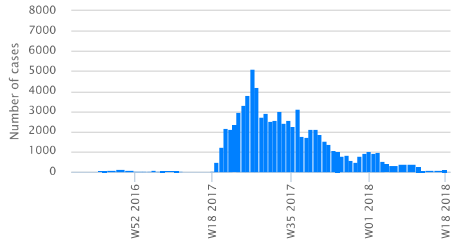


Figure 3s | Say'on سئون

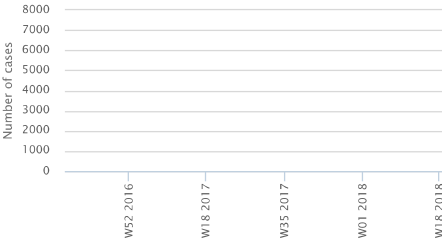


Figure 3t | Shabwah شبوة

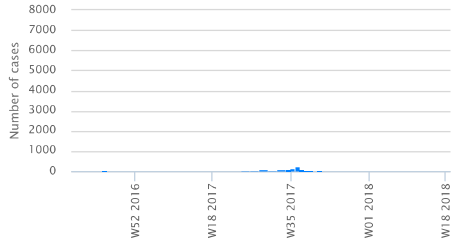
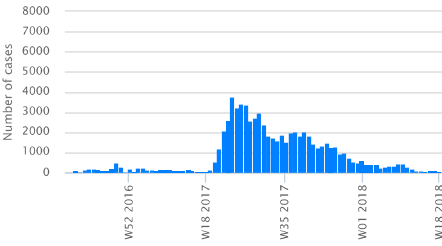


Figure 3v | Taizz تعز



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

