



اليمن Yemen

الاستجابة للكوليرا Cholera Response

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

النشرة الوبائية الأسبوعية
Weekly Epidemiological Bulletin
W39 2017 (Sep 25-Oct 01)

Printed: 15:54 Tuesday, 03 October 2017 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 د.
F. Districts reporting in past week	المديريات ذات الأولوية هـ.
G. Epidemic curves by Governorate	المنحنى الوبائي حسب المحافظة هـ.

Highlights

- The cumulative total from 27 April 2017 to 1st October 2017 is 780,886 suspected cholera cases and 2,137 associated deaths, (CFR 0.27%). 27,773 suspected cases and 15 associated deaths were reported in W39.
- The national attack rate is 274.41 per 10,000. The five governorates with the highest cumulative attack rates per 10,000 are Amran (666), Al Mahwit (611), Al Dhale'e (580), Abyan (466) and Sanaa (392).
- In September, the districts with higher numbers of deaths are Al qafir (4), As Sabrah (4), Hazm al Udayn(3) and Hubaysh(3).
- Children under 5 years old represent 26.2% of total suspected cases. Children under 18 years old represent 56.3%.
- In total, 13,352 rapid diagnostic tests (RDT) have been performed which represents 17.1% coverage. 1,660 cultures have been performed which represents 19.1% coverage. In September, 28 culture were reported positive in 10 districts. Ash Shaikh reported 10 positive cultures in September. The last positive laboratory confirmation was on the 21st September in Al Mualla district.

Governorate and District level

- The trend at country level over the past 3 weeks is considered stable.
- At governorate level, the trend from W36-W38 increased in 2 governorates: Saada (+25%), Marib (+12%).
- Those districts are still under particular surveillance: As Safra (Saada); Al marawit, Az Zuhra, Ad Dahi (Al Hudaydah).

Conclusions and actions

- In response to the continued increases in numbers of suspected cholera cases week 37 and 38 in Al Hudaydah, WHO is strengthening RDT use in DTC's and daily surveillance of cases in this governorate.

A. ملخص المؤشرات Summary indicators



Cholera Response | Cumulative figures from 27/04/2017 to 1/10/2017

780,886

حالات الاشتباه
Suspected cases

حالة اشتباه في
الأسبوع الحالي
27,773 suspected cases
in current week

2,137

الوفيات
Associated deaths

حالة وفاة في
الأسبوع الحالي
15 associated deaths
in current week

0.27%

معدل الاماته بين
الحالات
Case Fatality Rate

96%

المحافظات المتأثرة
بالوباء
Governorates
affected

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

92%

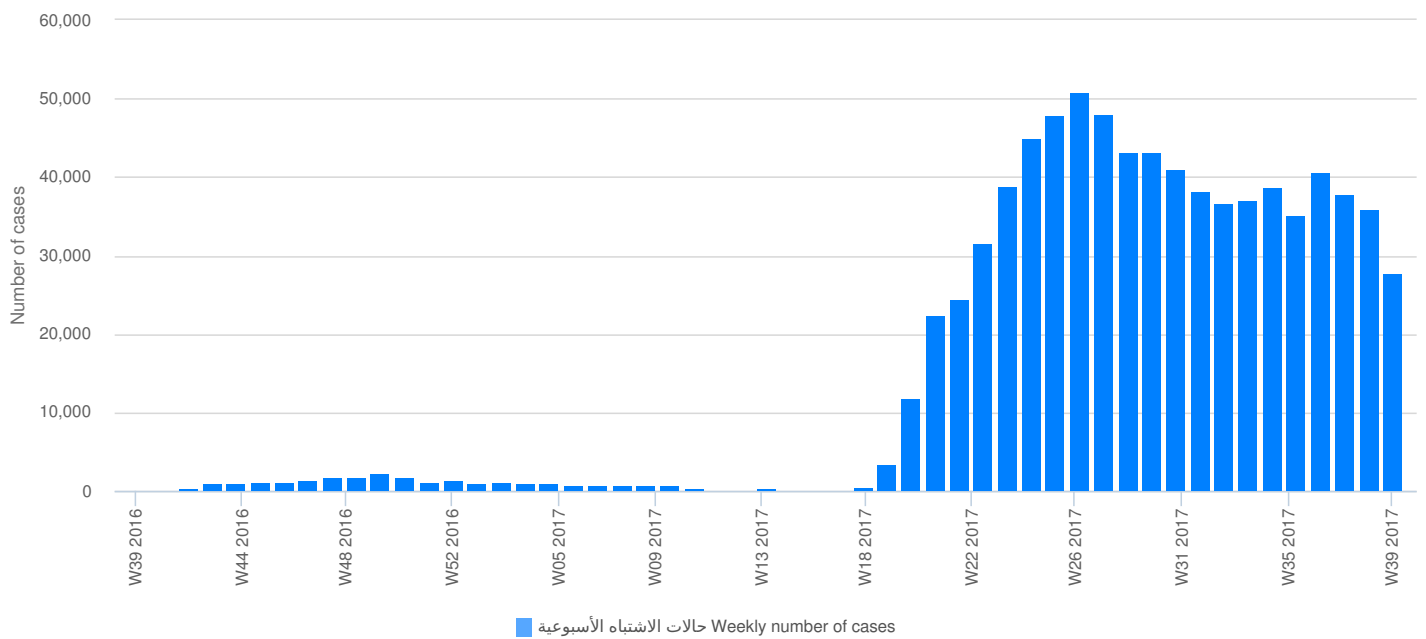
المديريات المتأثرة
بالوباء
Districts
affected

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

B. المنحنى الوبائي Epidemic curve

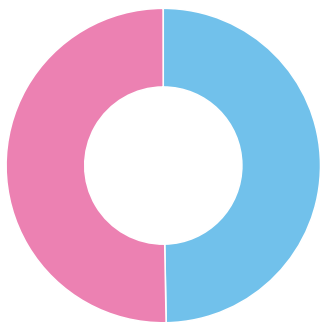
الشكل (1) المنحنى الوبائي على المستوى الوطني

Figure 1 | Epidemic curve (Country)



الشكل (2 أ) حالات الكوليرا على مستوى الجنس

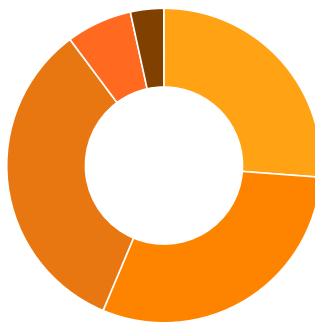
Figure 2a Cases by sex (Cumul.)



Male (50% ; n = 393,734)
Female (50% ; n = 397,584)

الشكل (2 ب) حالات الكوليرا على مستوى الفئات العمرية

Figure 2b Cases by age (Cumul.)



< 5 (26.2% ; n = 198,811)
5-17 (30.1% ; n = 228,802)
18-44 (33.5% ; n = 254,075)
45-59 (6.8% ; n = 51,281)
≥ 60 (3.4% ; n = 26,061)

الشكل (2 ج) حالات الكوليرا بالنسبة لحالة المريض

Figure 2c Cases by outcome (Cumul.)



Discharged (59.11% ; n = 461,594)
Referred (0.26% ; n = 2,009)
Died (0.27% ; n = 2,137)
Unknown (40.63% ; n = 317,283)

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 1/10/2017)					الاتجاه 3 أسابيع 3 week trend				
	حالات الاشتباه Cases	الوفيات Deaths	معدل الامانه CFR ¹	السكان Population	معدل الإصابة AR ²	-3 أسابيع -3W	-2 أسابيع -2W	-1 أسابيع -1W	الأسبوع الحالي W	اتجاه Trend ³
Amran عمران	77,353	167	0.22%	1,160,559	666.52	4,271	3,677	3,383	2,664	▼ -10%
Al Mahwit المحويت	44,671	140	0.31%	730,209	611.76	1,961	1,961	1,973	1,835	► 0%
Al Dhale'e الصالح	42,428	79	0.19%	731,496	580.02	2,180	1,642	1,621	1,410	▼ -11%
Abyan أبين	26,656	35	0.13%	570,832	466.97	1,408	1,354	1,145	569	▼ -12%
Sana'a صعاء	57,724	122	0.21%	1,470,346	392.59	3,120	1,790	1,726	2,091	▼ -22%
Hajjah حجة	86,587	401	0.46%	2,329,741	371.66	5,351	4,361	4,281	2,722	► -8%
Dhamar ذمار	68,336	153	0.22%	2,012,264	339.60	4,252	3,859	3,570	3,167	► -8%
Al Hudaydah الحديدة	103,286	254	0.25%	3,238,199	318.96	5,929	7,614	7,144	4,341	► 4%
Al Bayda البيضاء	23,430	28	0.12%	759,388	308.54	1,444	1,145	1,141	935	► -8%
Amanat Al Asimah العاصمة	77,457	66	0.09%	2,827,824	273.91	2,428	2,555	2,430	1,774	► -2%
Lahj لحج	20,854	20	0.10%	1,008,864	206.71	1,442	1,431	1,297	1,088	► -7%
Raymah ريمة	12,229	113	0.92%	606,776	201.54	411	405	424	440	► 3%
Aden عدن	18,153	62	0.34%	922,996	196.67	543	578	445	387	▼ -15%
Al Jawf الجوف	11,111	21	0.19%	578,585	192.04	973	663	759	496	► -5%
Ibb إب	50,350	276	0.55%	2,957,138	170.27	2,027	1,664	1,648	1,394	► -7%
Taizz تعز	46,922	182	0.39%	2,998,300	156.50	1,973	1,980	1,770	1,577	► -7%
Marib مأرب	4,887	7	0.14%	358,542	136.30	256	240	294	275	▲ +12%
Al Maharah المهرة	1,162	1	0.09%	153,306	75.80	21	8	3	0	▼ -72%
Sa'ada صعدة	5,435	5	0.09%	911,467	59.63	432	737	830	515	▲ +25%
Shabwah شبوثة	1,321	3	0.23%	636,008	20.77	239	84	52	50	▼ -58%
Mokklla المكلا	520	2	0.38%	774,430	6.71	74	95	60	43	▼ -21%
Say'on سينون	14	0	0.00%	654,921	0.21	0	1	0	0	▼ -100%
Yemen اليمن	780,886	2,137	0.27%	28,457,130	274.41	40,735	37,844	35,996	27,773	► -6%

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

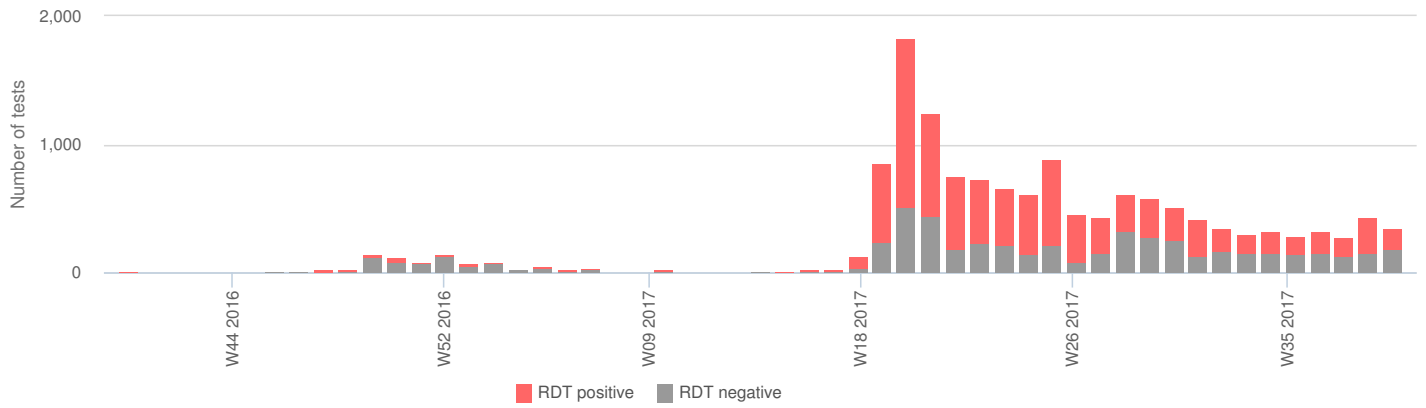


Figure 5 | Rapid Diagnostic Kit (RDT)

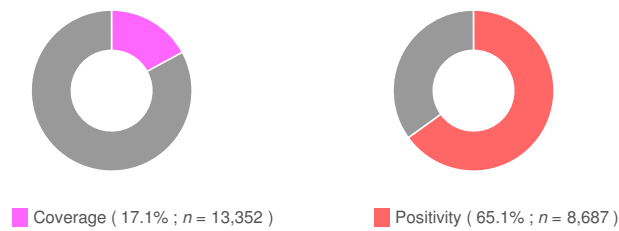


Figure 6 | Culture



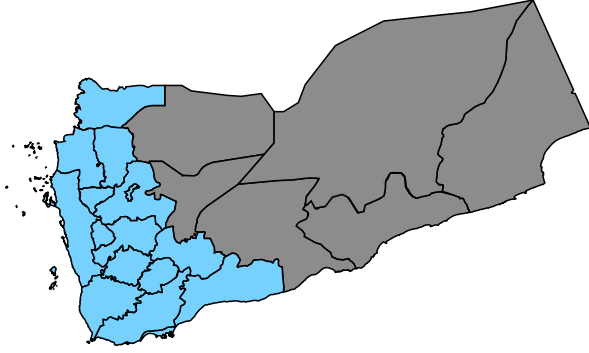
Table 2 | Summary of key laboratory indicators by Governorate

Governorate	Rapid Diagnostic Kit (RDT)					Culture			
	Cases	Total tested	Coverage	Total +ve	+ivity rate	Total tested	Coverage	Total +ve	+ivity rate
أبين أبين	26,656	183	6.9%	134	73.2%	36	26.9%	23	63.9%
Aden عدن	18,153	380	20.9%	263	69.2%	122	46.4%	97	79.5%
Al Bayda البيضاء	23,430	774	33.0%	555	71.7%	114	20.5%	9	7.9%
Al Dhale'e الضالع	42,428	202	4.8%	83	41.1%	20	24.1%	3	15.0%
Al Hudaydah الحديدة	103,286	307	3.0%	139	45.3%	27	19.4%	8	29.6%
Al Jawf الجوف	11,111	1213	109.2%	854	70.4%	39	4.6%	12	30.8%
Al Maharah المهرة	1,162	259	222.9%	114	44.0%	22	19.3%	14	63.6%
Al Mahwit المحويت	44,671	1008	22.6%	706	70.0%	33	4.7%	10	30.3%
Amanat Al Asimah أمانة العاصمة	77,457	2903	37.5%	1764	60.8%	312	17.7%	170	54.5%
Amran عمران	77,353	842	10.9%	513	60.9%	59	11.5%	21	35.6%
Dhamar ذمار	68,336	323	4.7%	232	71.8%	96	41.4%	21	21.9%
Hajjah حجة	86,587	520	6.0%	113	21.7%	29	25.7%	10	34.5%
Ibb إب	50,350	345	6.9%	287	83.2%	38	13.2%	13	34.2%
Lahj لحج	20,854	1064	51.0%	552	51.9%	35	6.3%	12	34.3%
Marib مأرب	4,887	149	30.5%	121	81.2%	2	1.7%	0	0.0%
Moklla المكلا	520	84	161.5%	67	79.8%	47	70.1%	29	61.7%
Raymah ريمة	12,229	523	42.8%	346	66.2%	27	7.8%	5	18.5%
Sa'ada صعدة	5,435	907	166.9%	750	82.7%	12	1.6%	0	0.0%
Sana'a صنعاء	57,724	551	9.5%	425	77.1%	175	41.2%	43	24.6%
Say'on سيئون	14	13	928.6%	7	53.8%	9	128.6%	0	0.0%
Shabwah شبوة	1,321	108	81.8%	36	33.3%	39	108.3%	4	10.3%
Taizz تعز	46,922	694	14.8%	626	90.2%	367	58.6%	301	82.0%
Yemen اليمن	780,886	13,352	17.1%	8,687	65.1%	1,660	19.1%	805	48.5%

E. التوزيع الجغرافي مع مرور الوقت Geographic distribution over time

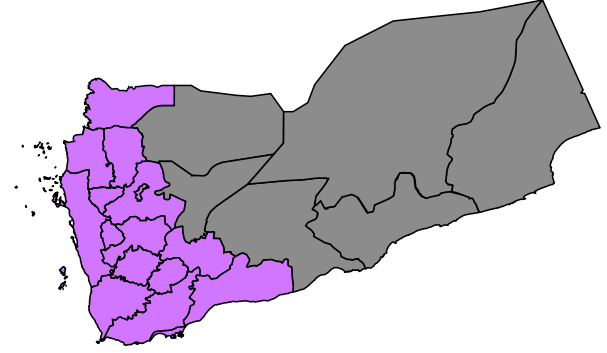
الخريطة (أ 1) عدد حالات الاشتباه للمحافظات

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



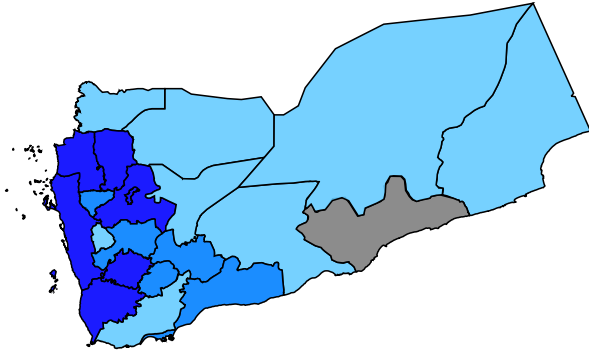
الخريطة (ب 1) معدل الإصابة للمحافظات

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



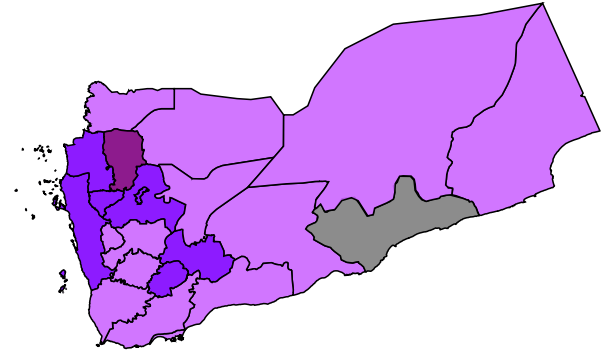
الخريطة (أ 1) عدد حالات الاشتباه للمحافظات

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



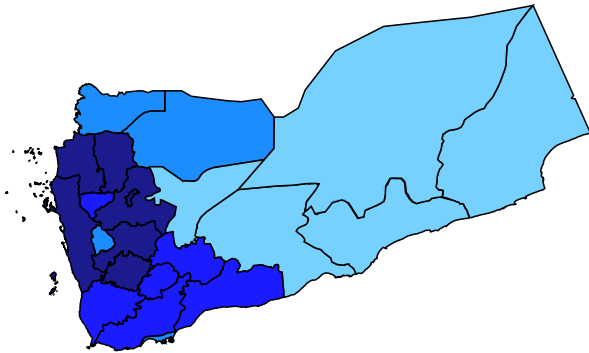
الخريطة (ب 1) معدل الإصابة للمحافظات

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



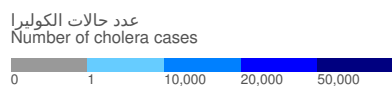
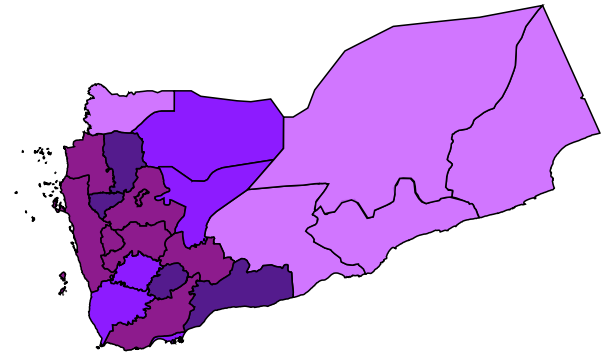
الخريطة (أ 1) عدد حالات الاشتباه للمحافظات

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



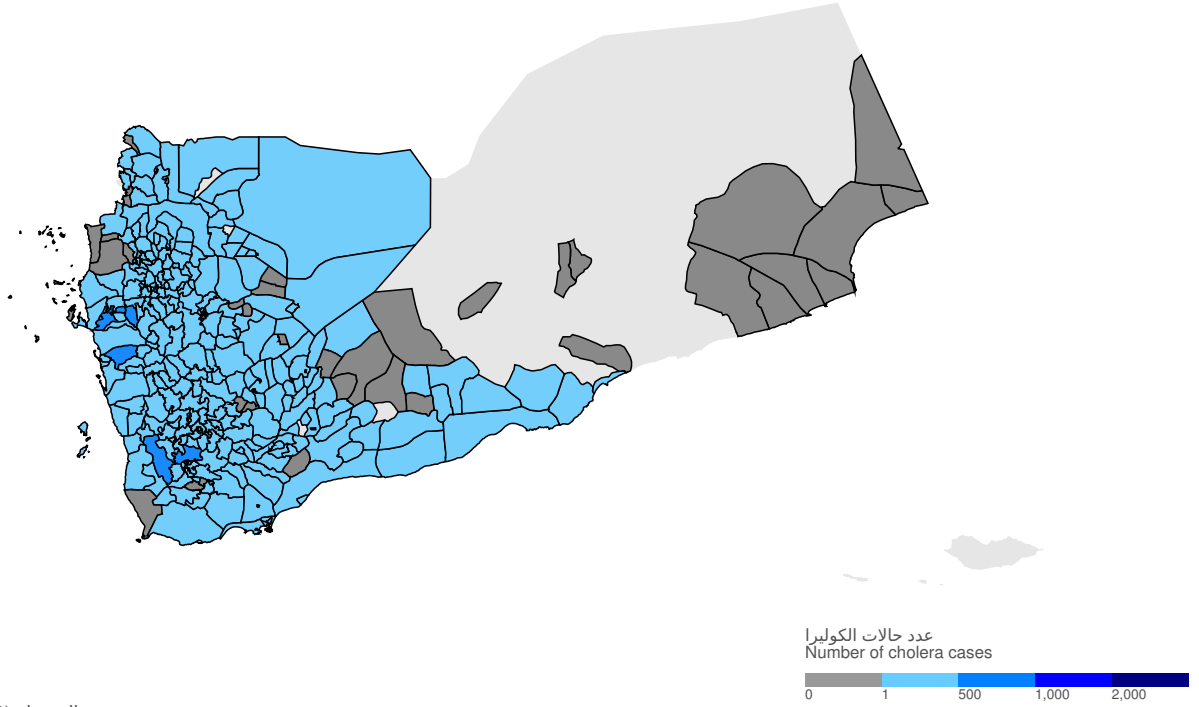
الخريطة (ب 1) معدل الإصابة للمحافظات

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

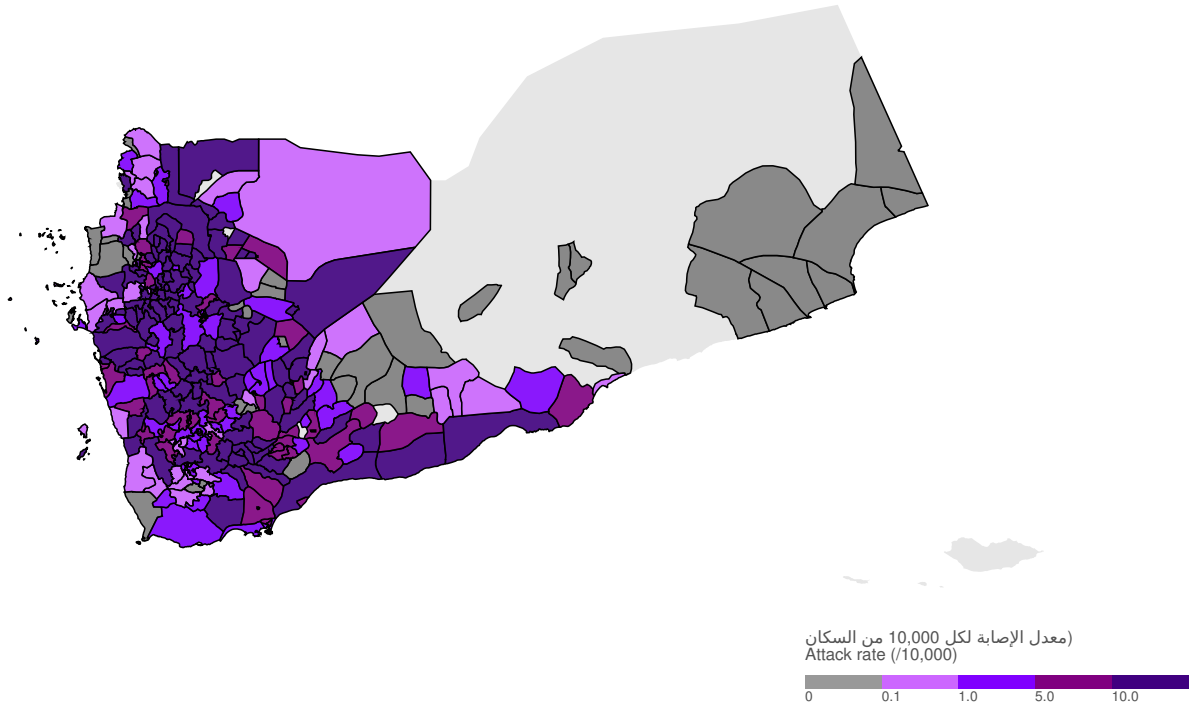


F. المديريات ذات الأولوية Districts reporting in current week

الخريطة (2 أ) عدد حالات الاشتباه الأولوية
Map 2 | Number of cases by district (W39 2017)



الخريطة (3 ب) معدل الإصابة الأولوية
Map 3 | Attack rate by district (W39 2017)



G. Epidemic curves by Governorate

Figure 3a | أبين Abyan

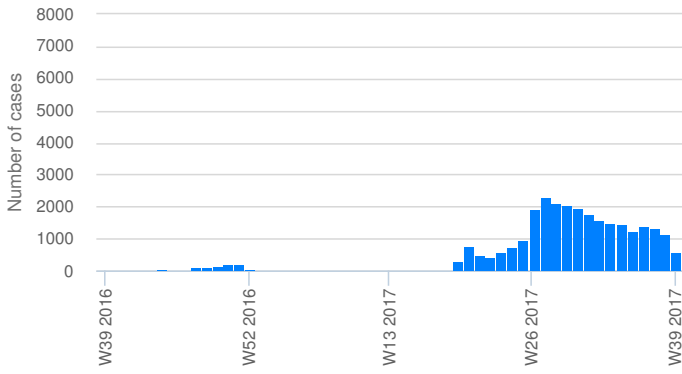


Figure 3b | عدن Aden

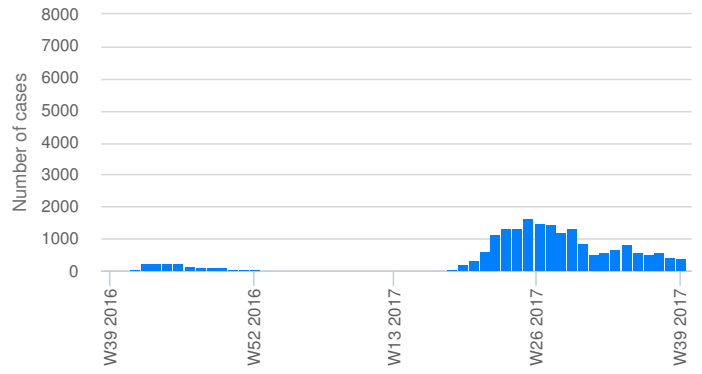


Figure 3c | البيضاء Al Bayda

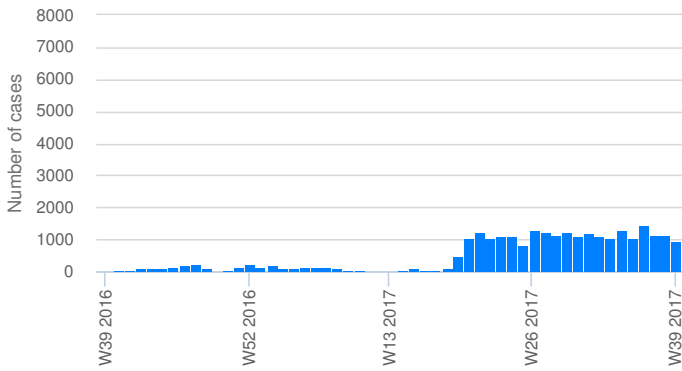


Figure 3d | الضالع Al Dhale'e

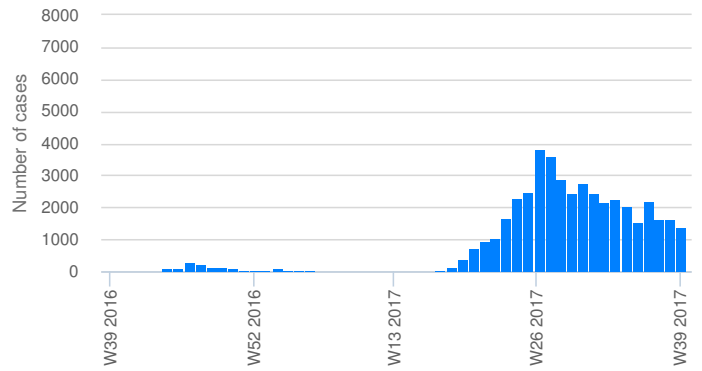


Figure 3e | الحديدة Al Hudaydah

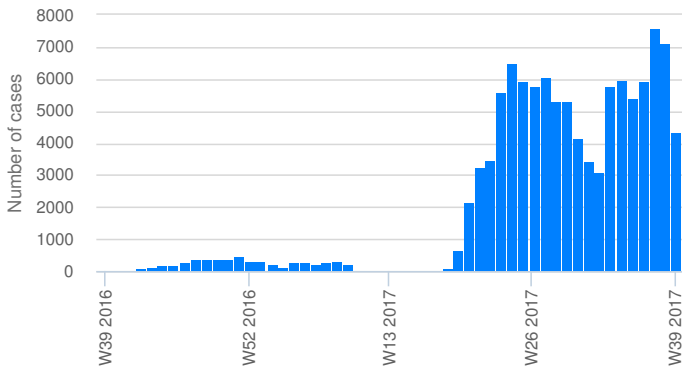


Figure 3f | الجوف Al Jawf

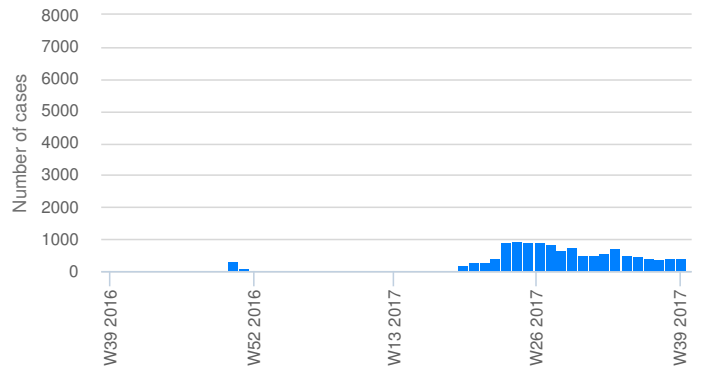


Figure 3g | المهرة Al Maharah

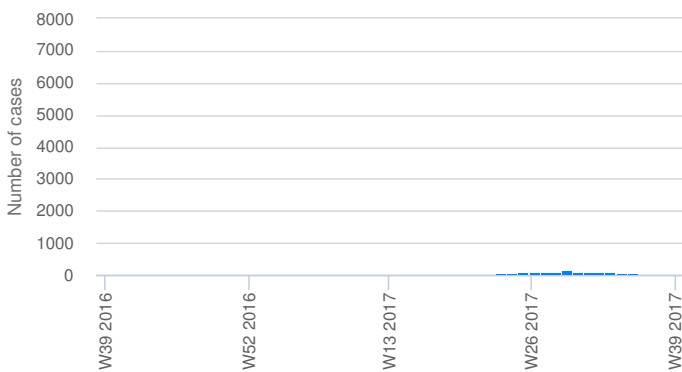


Figure 3h | المحويت Al Mahwit

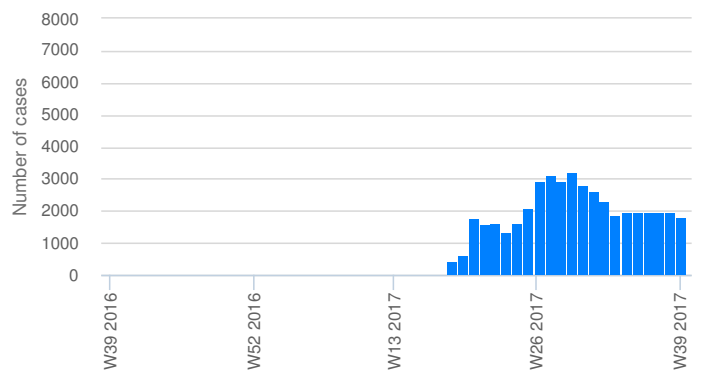


Figure 3i | Amanat Al Asimah أمانة العاصمة

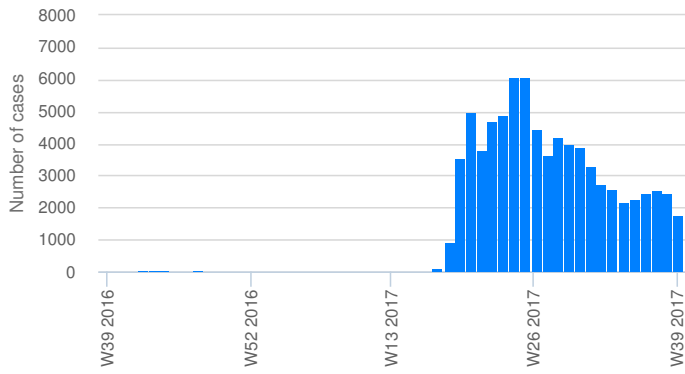


Figure 3j | Amran عمران

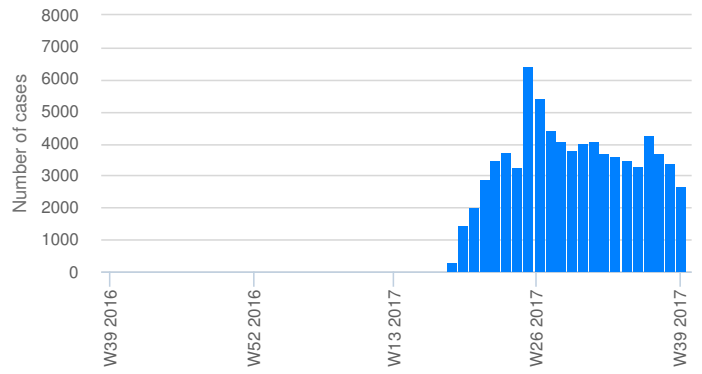


Figure 3k | Dhamar ذمار

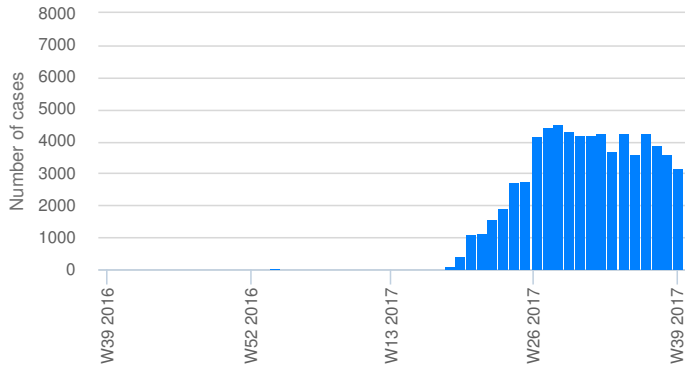


Figure 3l | Hajjah حجة

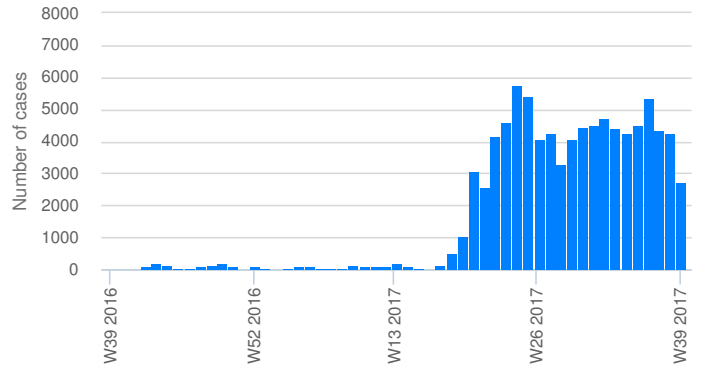


Figure 3m | Ibb إب

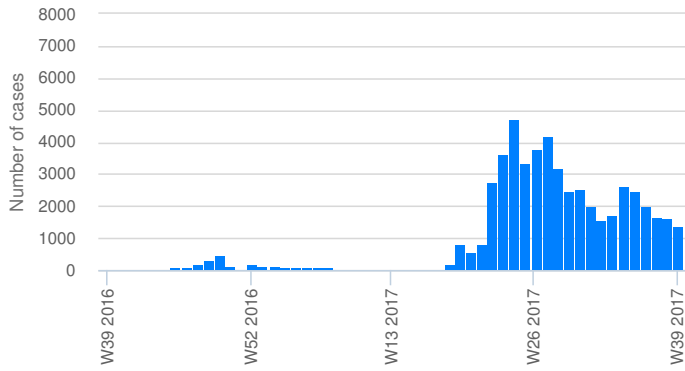


Figure 3n | Lahj لبح

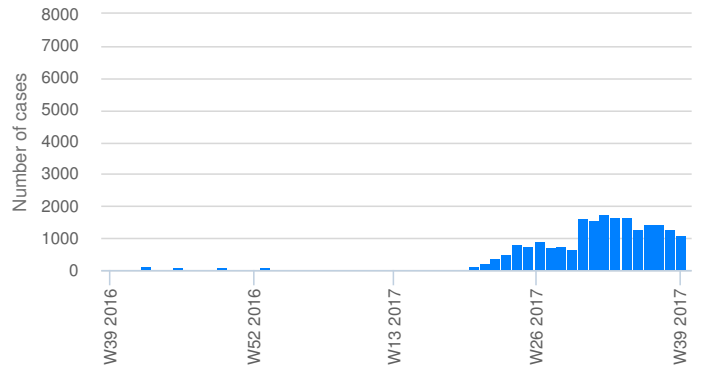


Figure 3o | Marib مأرب

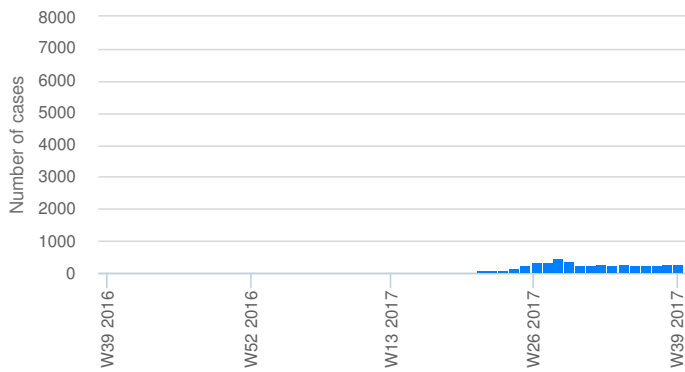


Figure 3p | Raymah ريمة

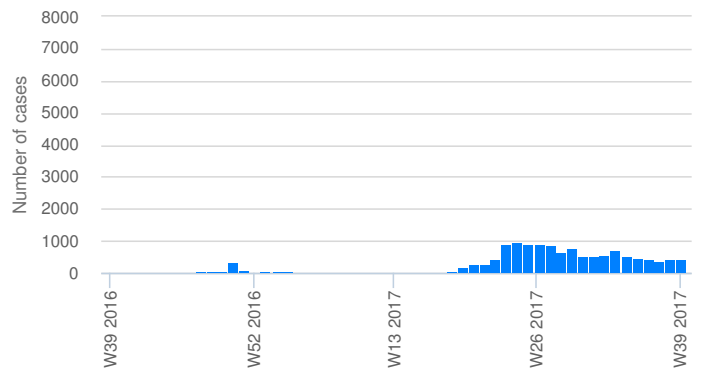


Figure 3q | Sa'ada صعدة

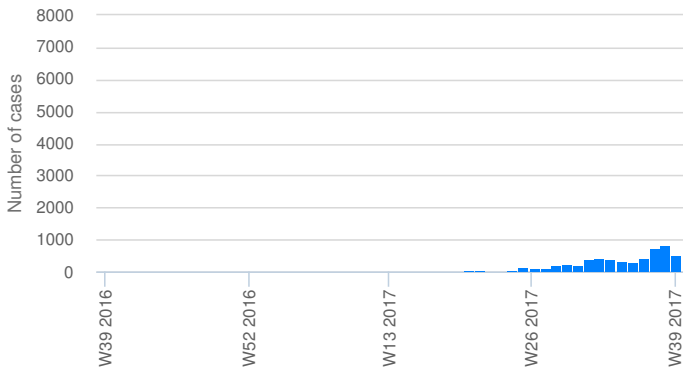


Figure 3r | Sana'a صنعاء

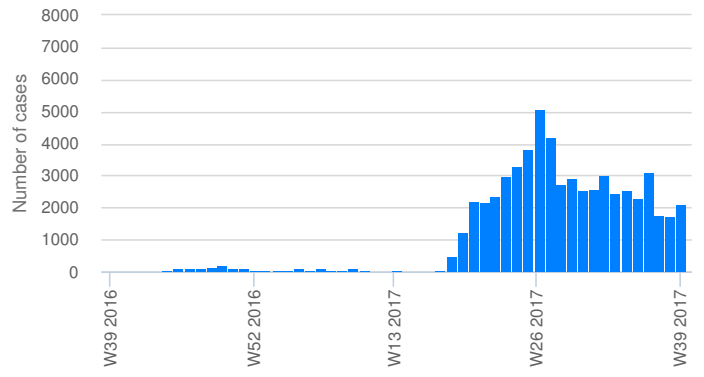


Figure 3s | Say'on سيئون

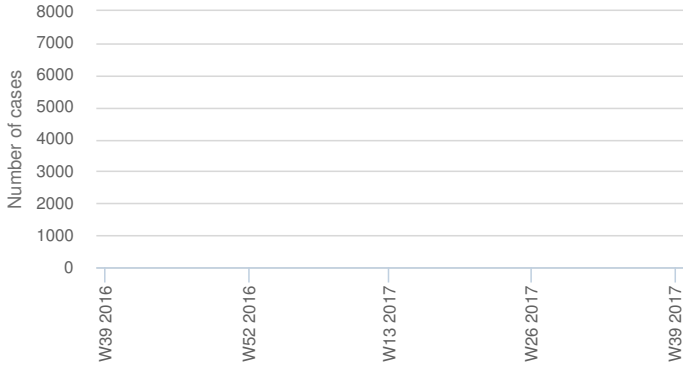


Figure 3t | Shabwah شبوة

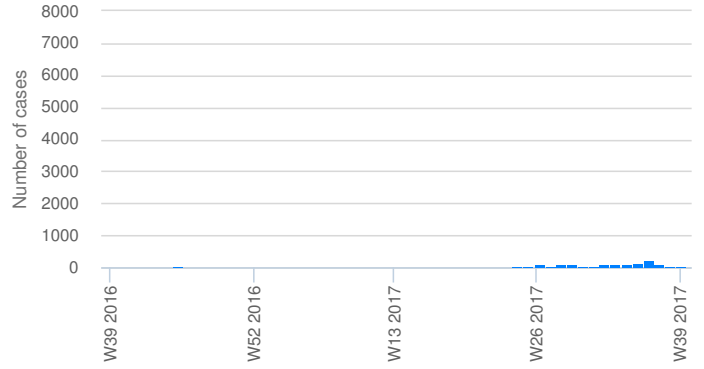
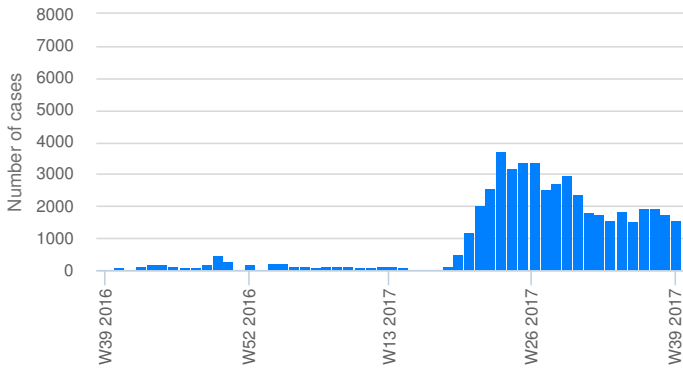


Figure 3v | Taizz تعز



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

Lauren O'Connor
Communications Officer
WHO Country Office
Sana'a, Yemen
Email: occonnorl@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