Yemen اليمن

الاستجابة للكوليرا
Cholera Response

Table of Contents جدول المحتويات

Highlights

Cumulative figures
-The cumulative total from 27 April 2017 to 11 Feb 2018 is 1,059,970 suspected cholera cases and 2,258 associated deaths, (CFR 0.21%), 1104 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%
- The national attack rate is 382.7 per 10,000. The five governorates with the highest cumulative attack rates per 10,000 remain Amran (894), Al Mahwit (857), Al Dhale'e (644), Hajjah (520) and Sana'a (515).
- Children under 5 years old represent 28.8% of total suspected cases.
- In total, 29,629 rapid diagnostic tests (RDT) have been performed which represents 28 % coverage.
- 2,732 cultures have been performed which represents 22.3% coverage.
- The last positive culture was on 4 Feb 2018 in Al Harith district in Amant Al Asimah
- 182 districts are still reporting suspected cholera cases since last 3 weeks
- 123 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 W4 –W6 decrease or was stable in all governorates except (Aden governorate) (+13%).

Trends
- The weekly number of cases is decreasing for the 22 consecutive weeks.
- The weekly proportion of severe cases has significantly decreased representing now 9% of the admitted cases.

Week 6 2018
- 3,886 suspected cases and 3 associated deaths were reported
- 9 % are severe cases
- 589 RDTs were performed, 131 were positive
- No culture test was performed this week

1,059,970

حالات الاشتباه
Suspected cases

حالة اشتباه في
الأسبوع الحالي 3,886

3,886 suspected cases
in current week

2,258

الوفيات
Associated deaths

حالة وفاة في
الأسبوع الحالي 3

3 associated deaths
in current week

0.21%

معدل الاماته بين الحالات
Case Fatality Rate

96%

المحافظات المتأثرة بالوباء
Governorates
affected

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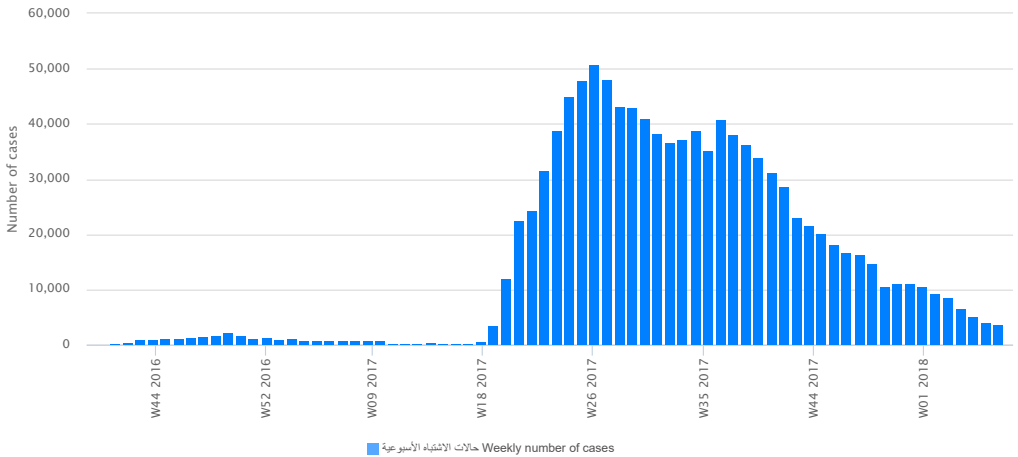(22 / 23 governorates)

92%

المديريات المتأثرة بالوباء
Districts
affected

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

B. المنحنى الوبائي **Epidemic curve**

الشكل (1) المنحنى الوبائي على المستوى الوطني
Figure 1 | Epidemic curve (Country)

Weekly number of cases حالات الاشتباه الأسبوعية

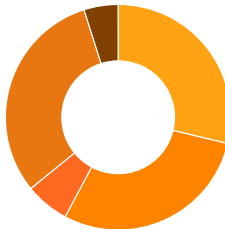الشكل (2 أ) حالات الكوليرا على مستوى الجنس
Figure 2a Cases by sex (Cumul.)
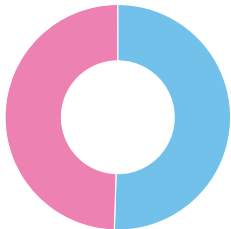
- Male ذكر (52% ; *n* = 19,800)
- Female أنثى (48% ; *n* = 17,923)

الشكل (2 ب) حالات الكوليرا على مستوى الفئات العمرية
Figure 2b Cases by age (Cumul.)

- < 5 (28.8% ; *n* = 301,644)
- 5-17 (29.0% ; *n* = 304,541)
- 18-44 (31.0% ; *n* = 325,040)
- 45-59 (6.3% ; *n* = 66,193)
- ≥ 60 (4.9% ; *n* = 51,314)

الشكل (2 ج) حالات الكوليرا بالنسبة لحالة المريض
Figure 2c Cases by outcome (Cumul.)

- Discharged شفاء (66.45% ; *n* = 704,329)
- Referred إحالة (0.32% ; *n* = 3,404)
- Died وفاة (0.21% ; *n* = 2,258)
- Unknown غير معرف (33.23% ; *n* = 352,237)

Trends in cases by age distribution and dehydration status

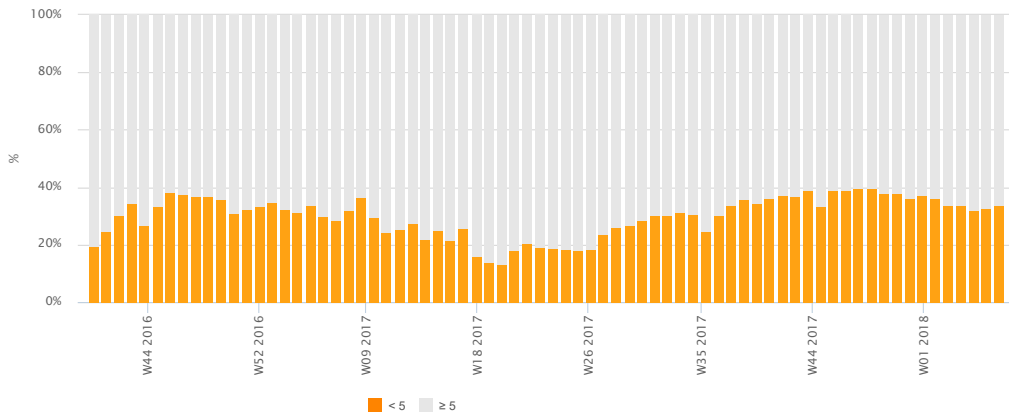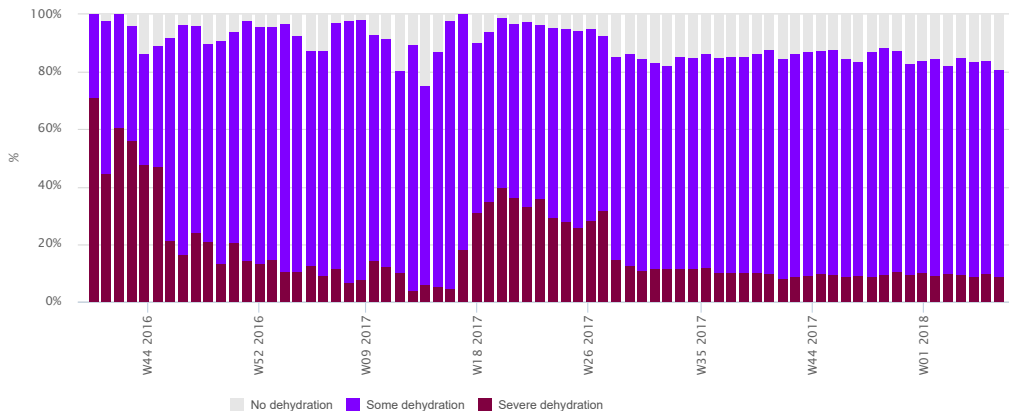**Figure 2d** | Trend in proportion of cases aged under 5[1]

Legend: < 5 (orange) ≥ 5 (grey)

Figure 2e | Trend in proportion of cases by dehydration status[1]

Legend: No dehydration (grey) Some dehydration (purple) Severe dehydration (dark red)

[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. المؤشرات الرئيسية حسب المحافظة Key indicators by governorate

جدول (1) خلاصة بالمؤشرات الرئيسية بالنسبة للمحافظات
Table 1 | Summary of key cholera indicators by Governorate

للمحافظات Governorate	تراكمي Cumulative (27/04/2017 to 11/2/2018)					الاتجاه 3 أسابيع 3 week trend				
	حالات الاشتباه Cases	الوفيات Deaths	معدل الاماته CFR[1]	السكان Population	معدل الإصابة AR[2]	أسابيع 3- -3W	أسابيع 2- -2W	أسابيع 1- -1W	الأسبوع الحالي W	اتجاه Trend[3]
عمران Amran	103,814	176	0.17%	1,160,559	894.52	494	360	271	249	▼ -28%
المحويت Al Mahwit	62,606	151	0.24%	730,209	857.37	371	425	280	318	▼ -22%
الضالع Al Dhale'e	47,135	81	0.17%	731,496	644.36	0	0	3	0	▲ +200%
حجة Hajjah	121,287	422	0.35%	2,329,741	520.60	518	29	1	3	▼ -99%
صنعاء Sana'a	75,856	123	0.16%	1,470,346	515.91	522	400	351	324	▼ -17%
ذمار Dhamar	102,774	161	0.16%	2,012,264	510.74	950	699	651	579	▼ -15%
أبين Abyan	28,243	35	0.12%	570,832	494.77	0	0	0	2	■ Interrupt
الحديدة Al Hudaydah	155,245	282	0.18%	3,238,199	479.42	1,202	939	799	895	▼ -18%
البيضاء Al Bayda	30,265	36	0.12%	759,388	398.54	462	448	266	277	▼ -32%
أمانة العاصمة Amanat Al Asimah	102,493	71	0.07%	2,827,824	362.44	763	793	562	496	▼ -20%
ريمة Raymah	17,641	120	0.68%	606,776	290.73	399	344	224	193	▼ -31%
الجوف Al Jawf	15,965	22	0.14%	578,585	275.93	38	64	21	8	▼ -49%
لحج Lahj	24,342	22	0.09%	1,008,864	241.28	0	0	1	0	▲ +200%
عدن Aden	20,954	62	0.30%	922,996	227.02	19	21	24	22	▲ +13%
إب Ibb	66,609	288	0.43%	2,957,138	225.25	473	513	302	392	▼ -30%
تعز Taizz	63,592	188	0.30%	2,998,300	212.09	373	242	163	128	▼ -37%
مأرب Marib	7,286	7	0.10%	358,542	203.21	0	1	0	0	▼ -100%
صعدة Sa'ada	10,706	5	0.05%	905,145	118.28	2	1	0	0	▼ -100%
المهرة Al Maharah	1,168	1	0.09%	148,478	78.66	0	0	0	0	■ Interrupt
شبوة Shabwah	1,399	3	0.21%	604,243	23.15	0	0	0	0	■ Interrupt
المكلا Moklla	568	2	0.35%	400,788	14.17	0	0	0	0	■ Interrupt
سيئون Say'on	22	0	0.00%	376,237	0.58	0	0	0	0	■ Interrupt
اليمن Yemen	**1,059,970**	**2,258**	**0.21%**	**27,696,950**	**382.70**	**6,586**	**5,279**	**3,919**	**3,886**	**▼ -26%**

[1] معدل الاماته بين الحالات
[2] معدل الإصابة لكل 10,000 من السكان
[3] تم حساب المنحنى بناء على متوسط عدد الحالات خلال ثلاثة أسابيع سابقة
(لم يتم تضمين الاسبوع الحالي في حساب المنحنى 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)

▲ منحنى مرتفع	غير بمعدل 10%+ ≥
▶ منحنى مستقر	> -10% to < +10% غير بمعدل
▼ منحنى منخفض	غير بمعدل 10%- ≤
■ انقطاع في الارسال	عدد 0 حالة خلال 3 أسابيع متتالية

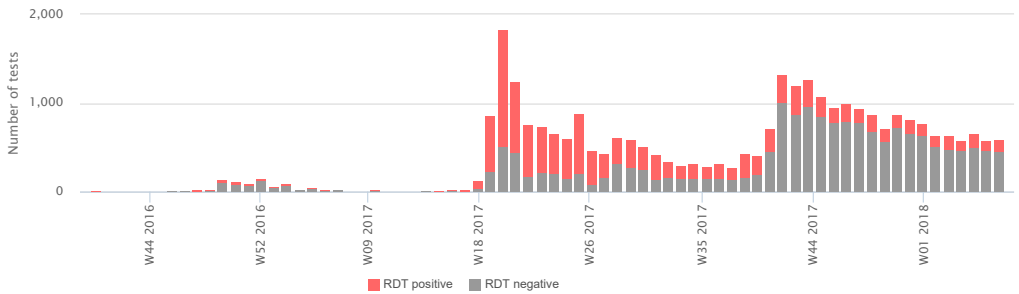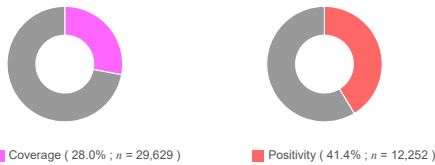| ▲ Increased trend	≥ +10% change
▶ Stable trend	> -10% to < +10% change
▼ Decreased trend	≤ -10% change
■ Interruption in transmission	0 cases for 3 consecutive weeks

D. Laboratory

Figure 4 | RDT results by week
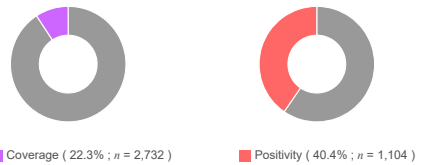

Figure 5 | Rapid Diagnostic Kit (RDT)

- Coverage (28.0% ; *n* = 29,629)
- Positivity (41.4% ; *n* = 12,252)

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

Figure 6 | Culture

- Coverage (22.3% ; *n* = 2,732)
- Positivity (40.4% ; *n* = 1,104)

*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		Cases	Rapid Diagnostic Kit (RDT)				Culture			
			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	20,954	584	27.9%	363	62.2%	173	47.7%	118	68.2%
Al Bayda	البيضاء	30,265	1910	63.1%	825	43.2%	194	23.5%	9	4.6%
Al Dhale'e	الضالع	47,135	347	7.4%	125	36.0%	42	33.6%	3	7.1%
Al Hudaydah	الحديدة	155,245	3139	20.2%	1128	35.9%	392	34.8%	227	57.9%
Al Jawf	الجوف	15,965	1403	87.9%	909	64.8%	60	6.6%	12	20.0%
Al Maharah	المهرة	1,168	263	225.2%	118	44.9%	25	21.2%	14	56.0%
Al Mahwit	المحويت	62,606	1991	31.8%	970	48.7%	60	6.2%	13	21.7%
Amanat Al Asimah	أمانة العاصمة	102,493	5283	51.5%	2179	41.2%	491	22.5%	190	38.7%
Amran	عمران	103,814	2188	21.1%	676	30.9%	89	13.2%	23	25.8%
Dhamar	ذمار	102,774	3089	30.1%	415	13.4%	119	28.7%	23	19.3%
Hajjah	حجة	121,287	767	6.3%	178	23.2%	46	25.8%	14	30.4%
Ibb	إب	66,609	708	10.6%	467	66.0%	99	21.2%	13	13.1%
Lahj	لحج	24,342	1160	47.7%	588	50.7%	44	7.5%	18	40.9%
Marib	مأرب	7,286	192	26.4%	124	64.6%	2	1.6%	0	0.0%
Moklla	المكلا	568	105	184.9%	80	76.2%	55	68.8%	32	58.2%
Raymah	ريمة	17,641	590	33.4%	386	65.4%	32	8.3%	5	15.6%
Sa'ada	صعدة	10,706	920	85.9%	752	81.7%	12	1.6%	0	0.0%
Sana'a	صنعاء	75,856	3252	42.9%	803	24.7%	294	36.6%	44	15.0%
Say'on	سيئون	22	21	954.5%	9	42.9%	11	122.2%	0	0.0%
Shabwah	شبوة	1,399	127	90.8%	53	41.7%	51	96.2%	9	17.6%
Taizz	تعز	63,592	1351	21.2%	952	70.5%	402	42.2%	314	78.1%
Yemen	**اليمن**	**1,059,970**	**29,629**	**28.0%**	**12,252**	**41.4%**	**2,732**	**22.3%**	**1,104**	**40.4%**

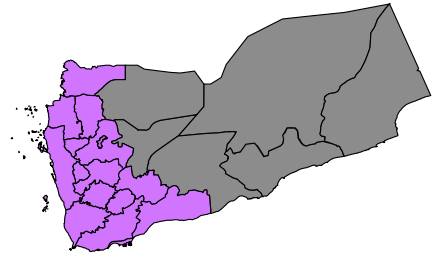# E. التوزيع الجغرافي مع مرور الوقت Geographic distribution over time

الخريطة (1 أ) عدد حالات الاشتباه للمحافظات
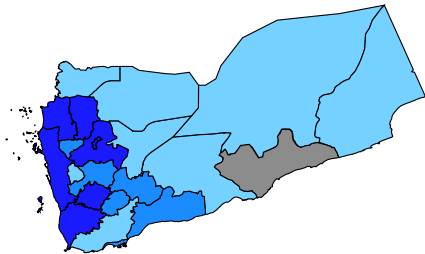**Map 1a** | Number of cases by governorate (Jan 2017 - Apr 2017)
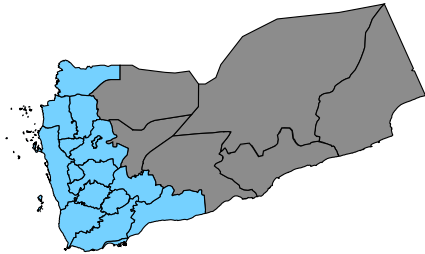
الخريطة (1 ب) معدل الاصابة للمحافظات
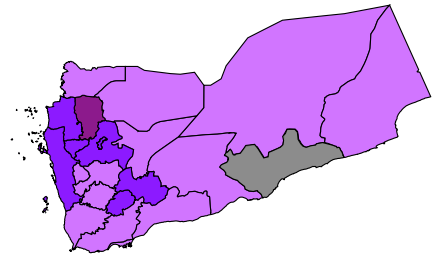**Map 1b** | Attack rate by governorate (Jan 2017 - Apr 2017)

الخريطة (1 أ) عدد حالات الاشتباه للمحافظات
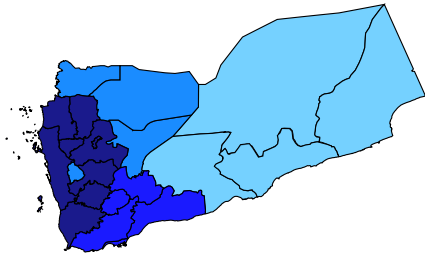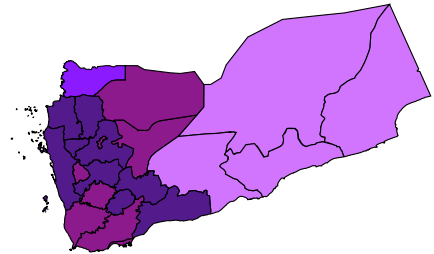**Map 1c** | Number of cases by governorate (Jan 2017 - Jun 2017)

الخريطة (1 ب) معدل الاصابة للمحافظات
Map 1d | Attack rate by governorate (Jan 2017 - Jun 2017)

الخريطة (1 أ) عدد حالات الاشتباه للمحافظات
Map 1e | Number of cases by governorate (Jan 2017 - present)

الخريطة (1 ب) معدل الاصابة للمحافظات
Map 1f | Attack rate by governorate (Jan 2017 - present)

عدد حالات الكوليرا
Number of cholera cases

| 0 | 1 | 10,000 | 20,000 | 50,000 |

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

| 0 | 0.1 | 100.0 | 200.0 | 400.0 |

F. المديريات ذات الأولوية **Districts reporting in current week**

الخريطة (2 أ) عدد حالات الاشتباه الأولوية
Map 2 | Number of cases by district (W6 2018)

عدد حالات الكوليرا
Number of cholera cases

0	1	500	1,000	2,000
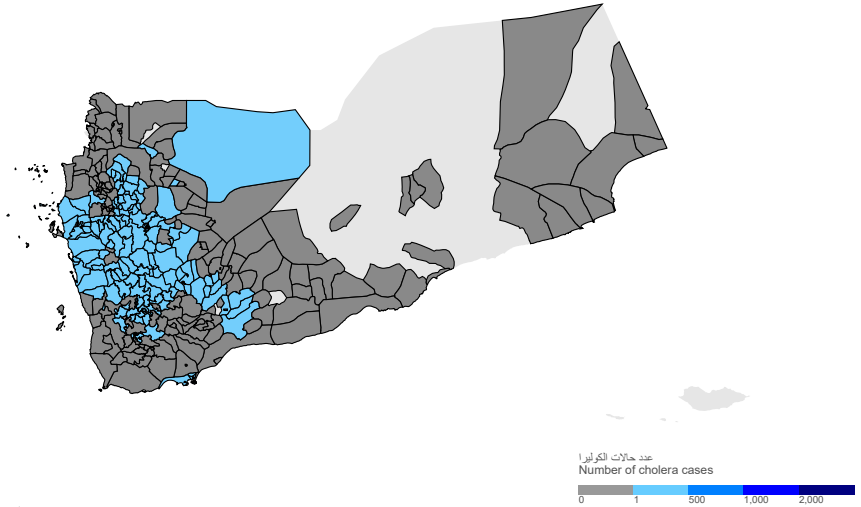
الخريطة (3 ب) معدل الاصابة الأولوية
Map 3 | Attack rate by district (W6 2018)

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

0	0.1	1.0	5.0	10.0
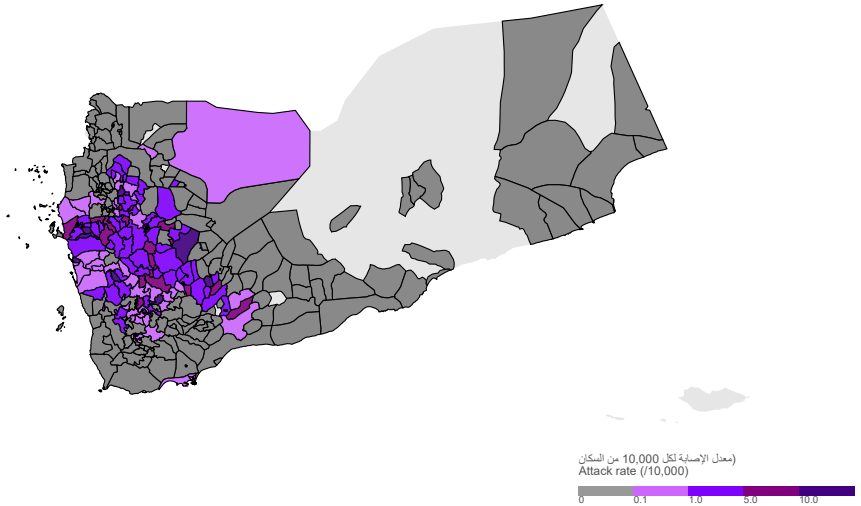
G. المنحنى الوبائي حسب المحافظة Epidemic curves by Governorate

Figure 3a | Abyan أبين
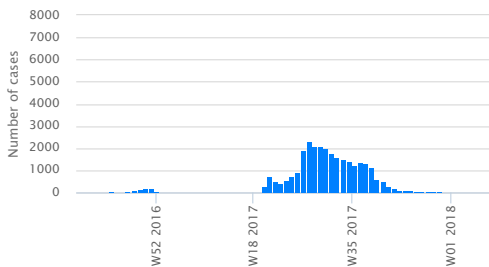
Figure 3b | Aden عدن
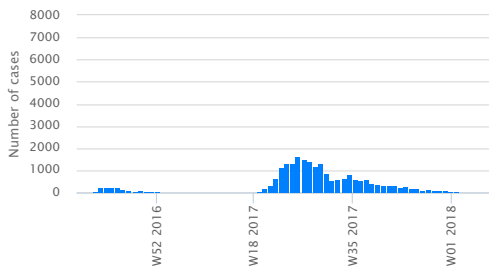
Figure 3c | Al Bayda البيضاء
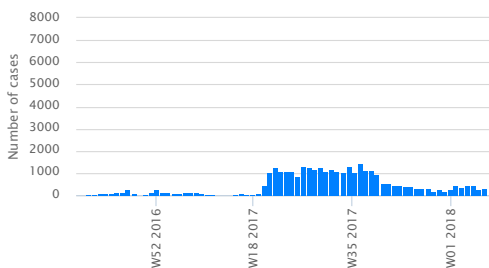
Figure 3d | Al Dhale'e الضالع
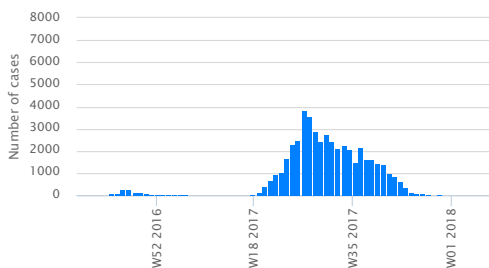
Figure 3e | Al Hudaydah الحديدة
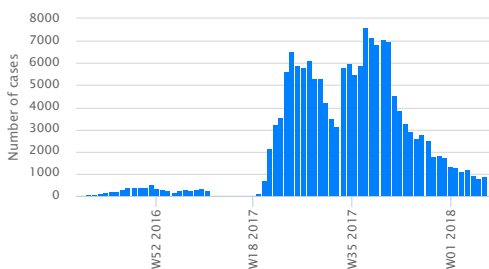
Figure 3f | Al Jawf الجوف
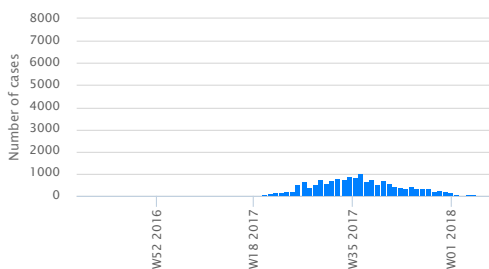
Figure 3g | Al Maharah المهرة
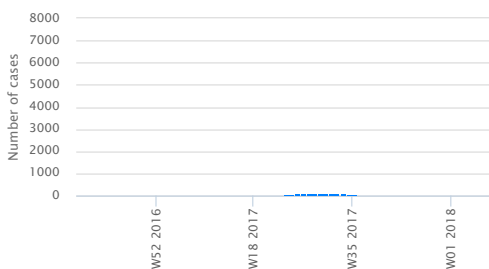
Figure 3h | Al Mahwit المحويت
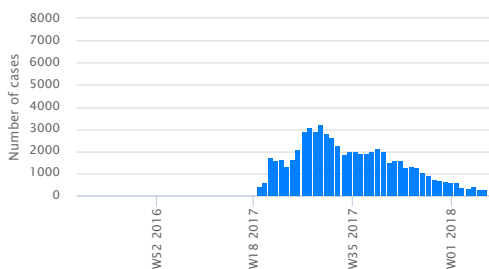
Figure 3i | Amanat Al Asimah أمانة العاصمة
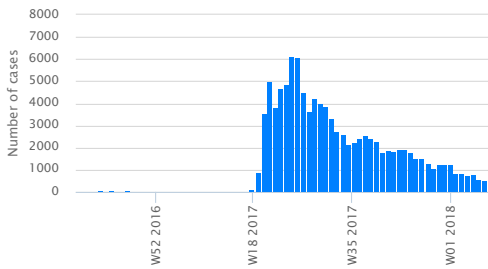
Figure 3j | Amran عمران
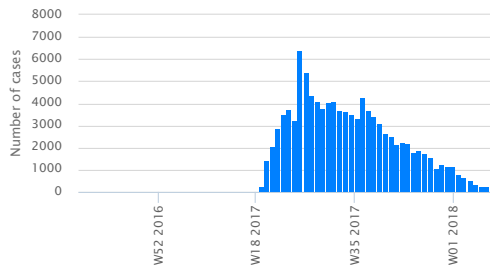
Figure 3k | Dhamar ذمار
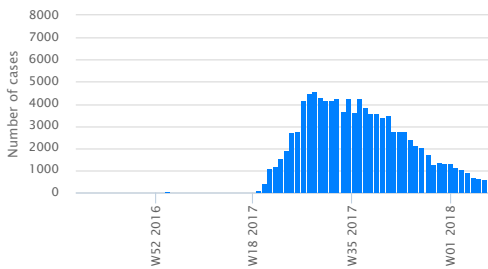
Figure 3l | Hajjah حجة
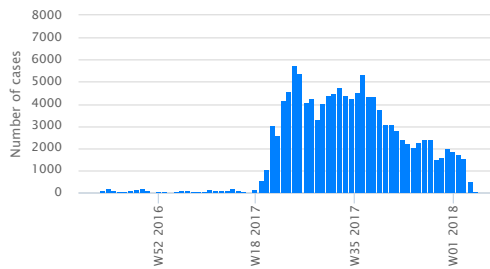
Figure 3m | Ibb إب
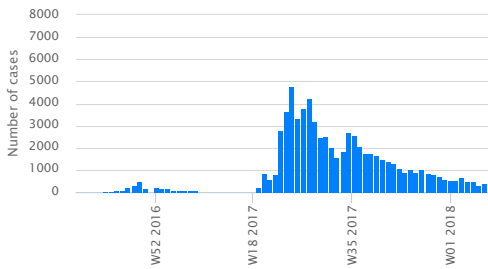
Figure 3n | Lahj لحج
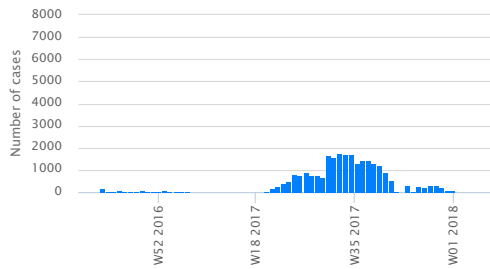
Figure 3o | Marib مأرب
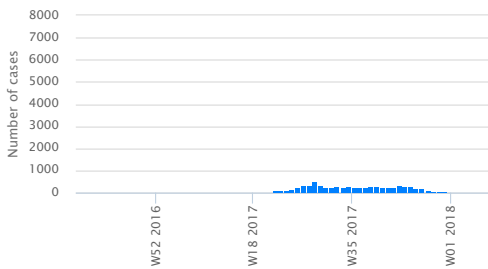
Figure 3p | Raymah ريمة
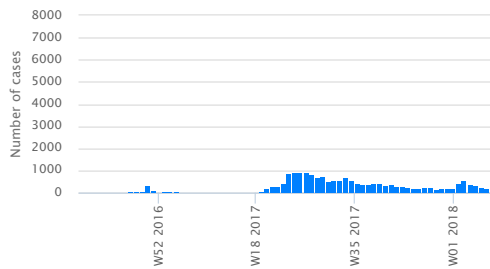
Figure 3q | Sa'ada صعدة
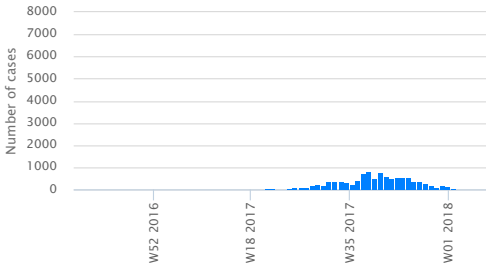
Figure 3r | Sana'a صنعاء
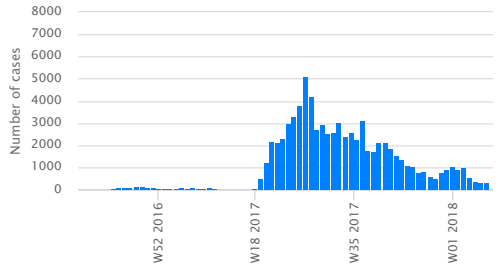
Figure 3s | Say'on سيئون
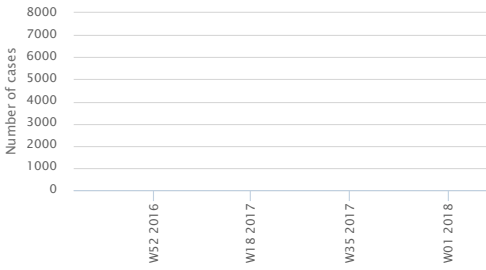
Figure 3t | Shabwah شبوة

Figure 3v | Taizz تعز