



Epidemiological Highlights

Week 22 (25-31 May 2020)

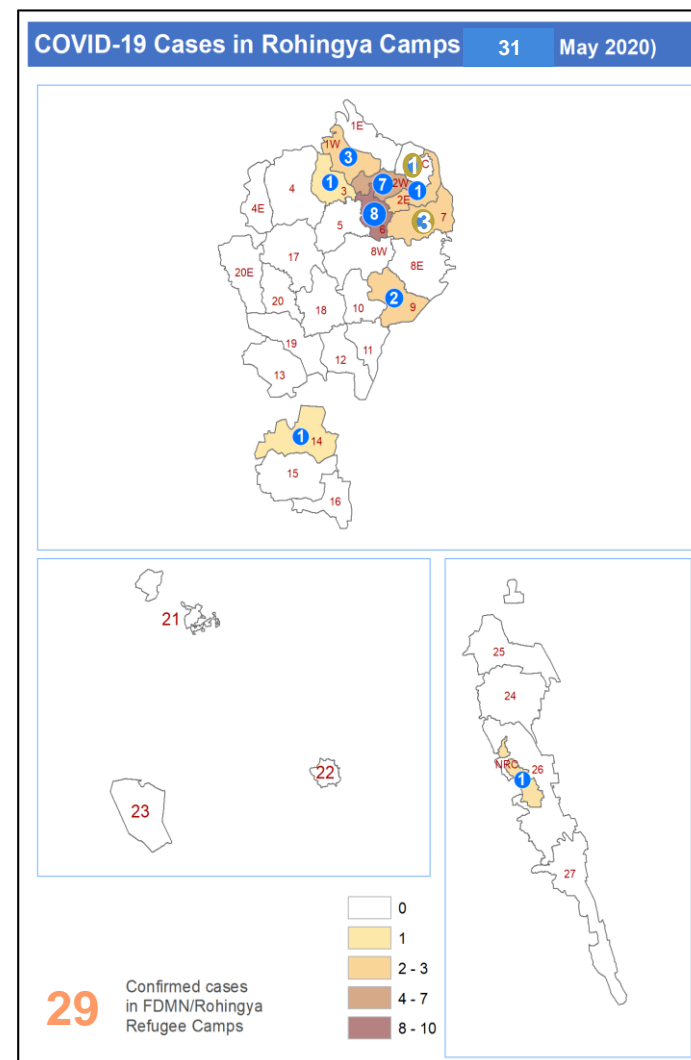
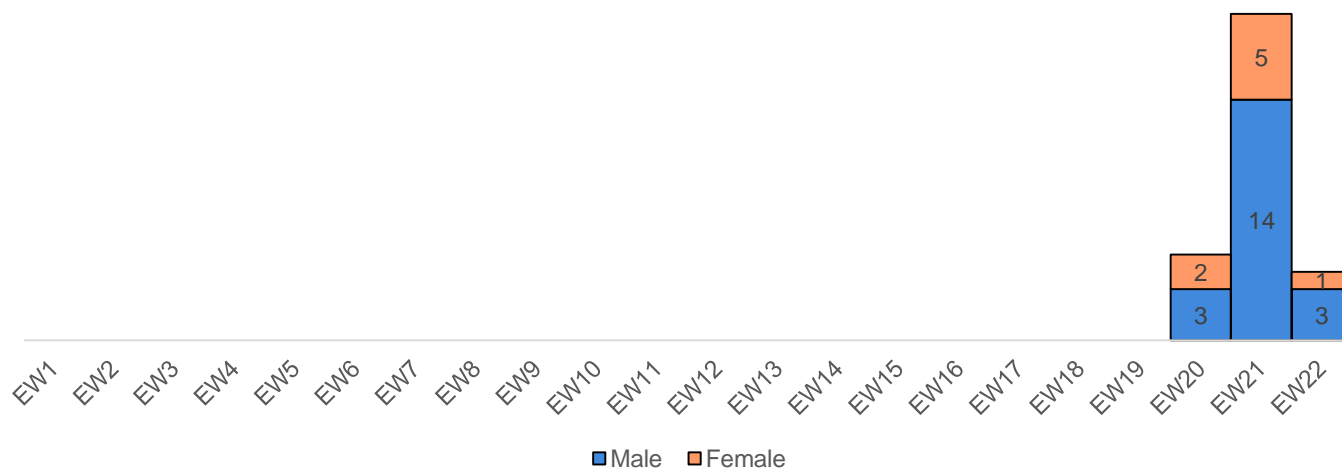


**World Health
Organization**

Highlights:

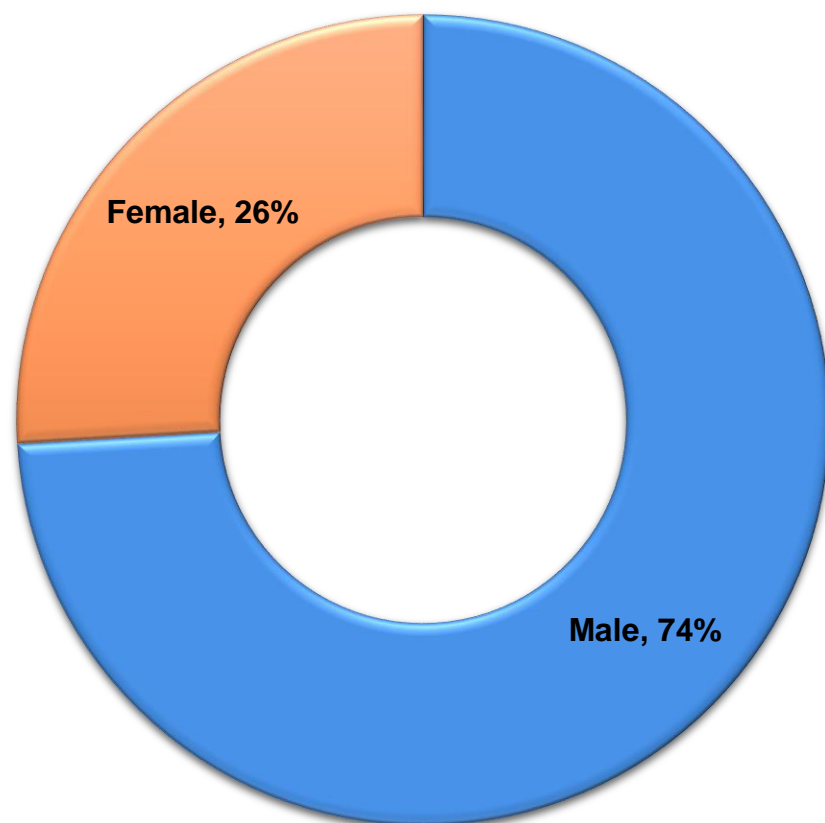
- 29 COVID-19 cases (22 Male, 7 Female) have been reported in the Rohingya Refugee Camps. Of these, 22 cases are over 18 years of age. Confirmed cases were identified through ARI/ILI sentinel surveillance and from contact of positive cases. The first death of a refugee, a 71 year-old male, from COVID-19 has been confirmed in the camps in Cox's Bazar on 31 May.

COVID-19 positive cases in camps (n=29)

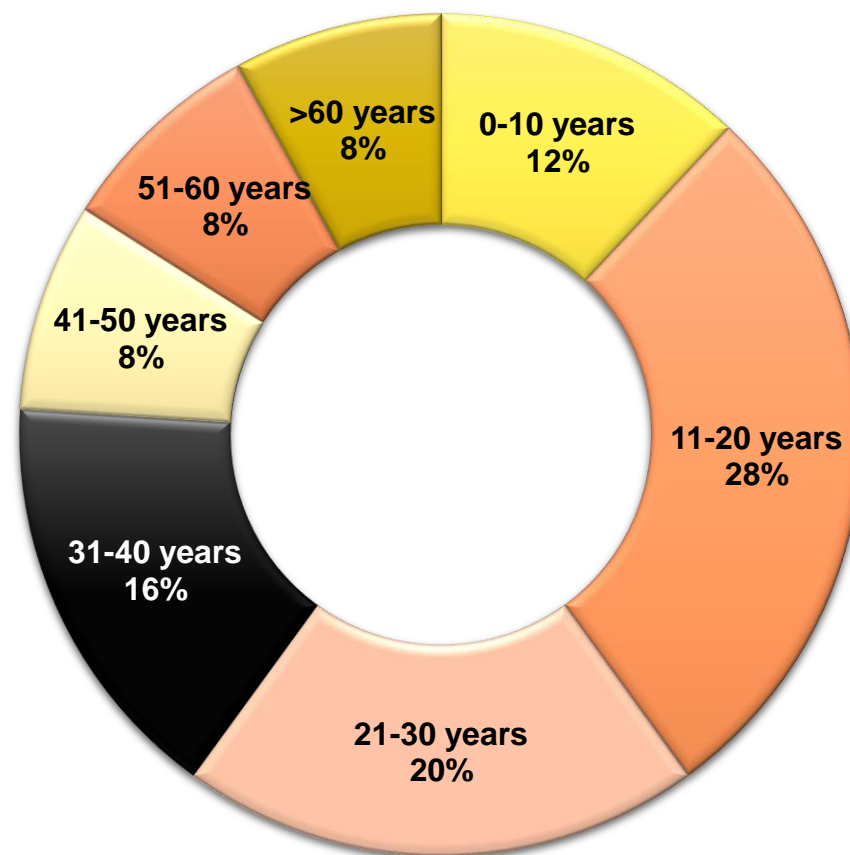


Highlights:

Sex Distribution (n=29)



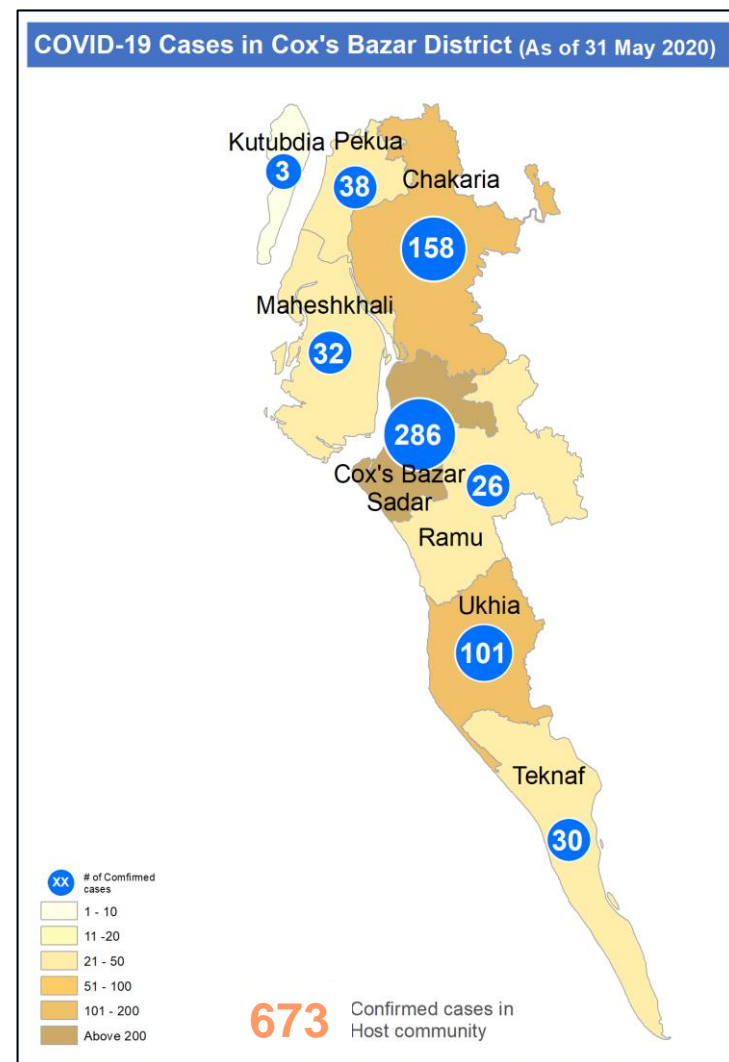
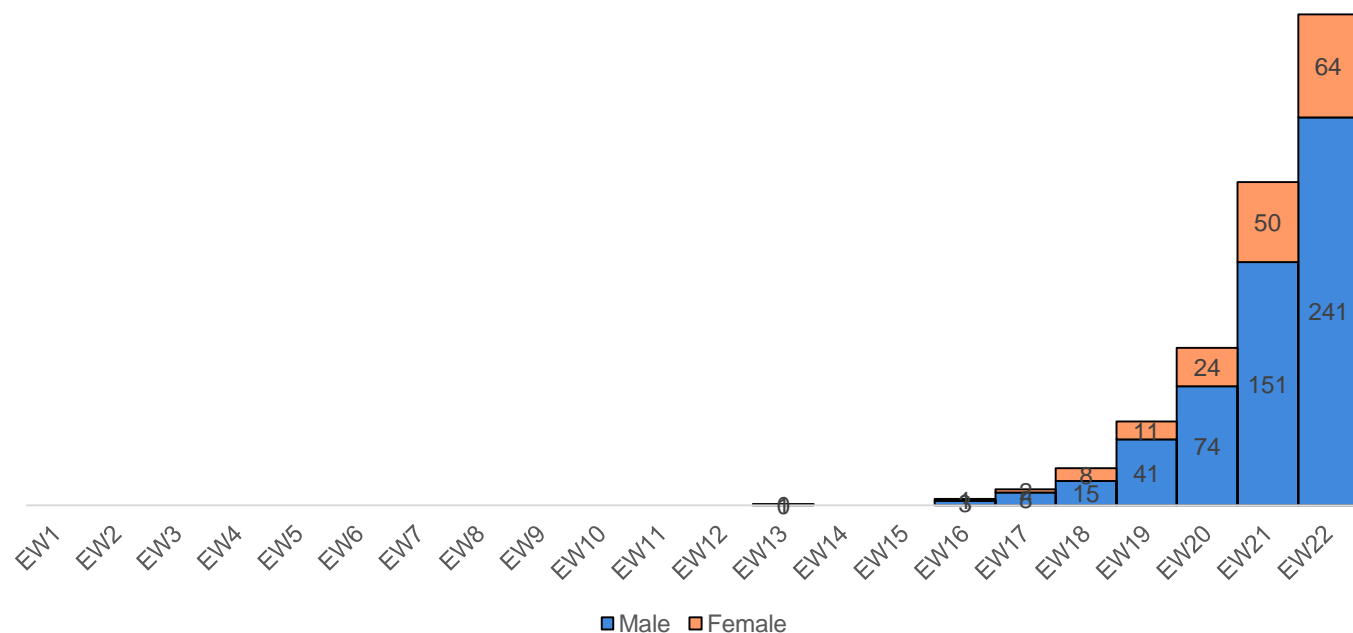
Age Group (n=29)



Highlights:

- 673 COVID-19 positive cases (cumulative) reported in Cox's Bazar as of 31 May 2020. The first laboratory confirmed case was identified in Cox's Bazar on 23 March.

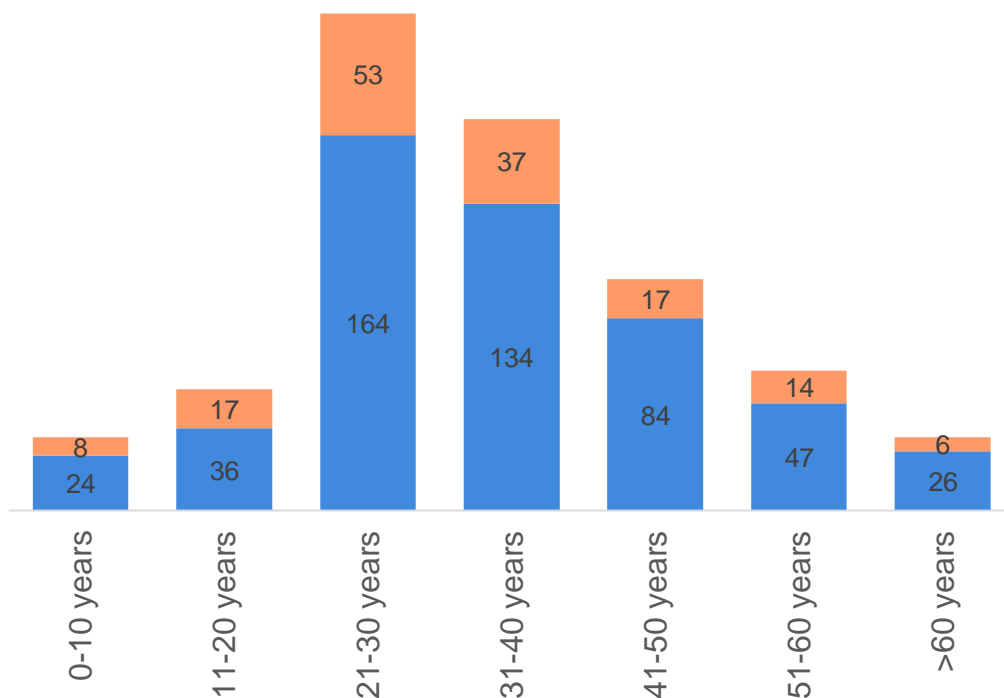
COVID-19 positive cases in Cox's Bazar (n==673)



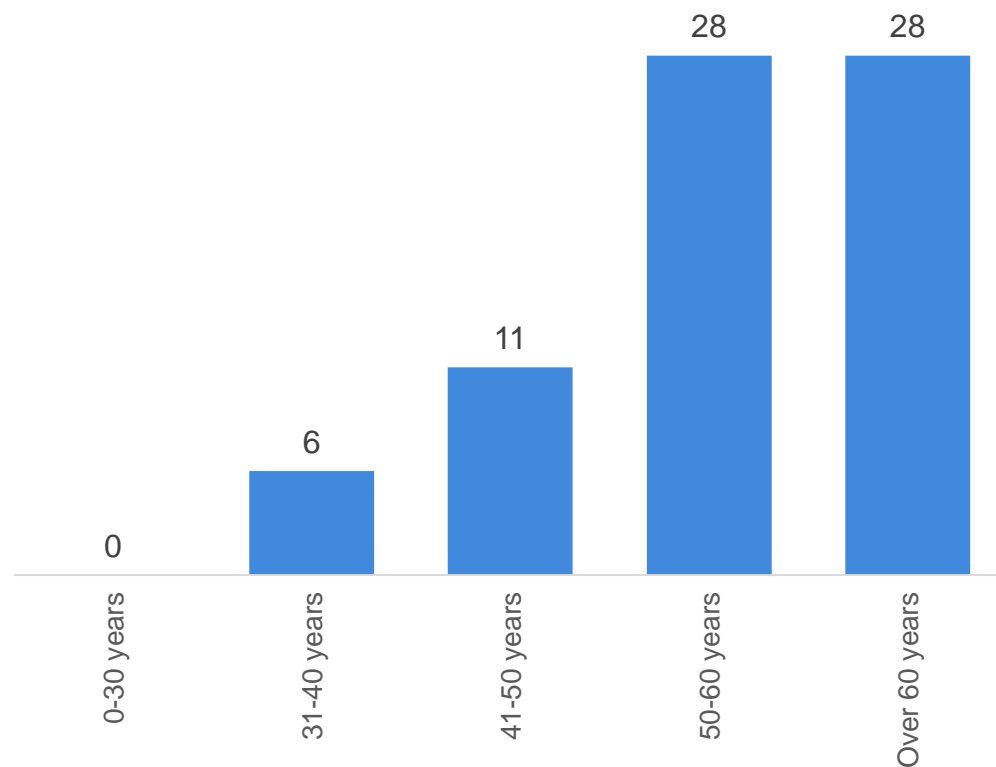
Highlights:

COVID-19 positive cases among host population
(n=673)

■ Male ■ Female



COVID-19 death (%) among host population
(n=13)



Highlights:

- Acute Respiratory Infection (12.2%), Diarrheal Diseases (7.9%) & Unexplained Fever (3.3%) are the diseases with highest proportional morbidity in week 22.
- Total consultation is significantly dropped over 50% in last 2 months. Out of total consultation, ARI contributed 12.2% in week 22 decreased from 26.4% in week 12.
- Two third reduction of total ARI consultation indicates changes in specific health seeking behavior of refugee population.
- Community-based mortality surveillance has included SARI death in weekly reporting. Two (02) SARI death has been reported so far.

EWARS Reporting Updates

- Total 139/166 (84%) health facilities registered in EWARS
- Only 106/139 weekly reports received in week 22.
- Completeness and Timeliness for this week is 73%.
- In 2020 cumulative completeness and timeliness of reporting is 89% and 82% respectively
- Total 21 alerts were triggered in week 22.
- All alerts were reviewed and verified by WHO EWARS team which is same as of previous week.

Diphtheria

1 suspected diphtheria case reported in go.data in week 22

A total of 9 118 case-patients were reported since 2017 to till date

- Confirmed = 329
- Probable = 2785
- Suspected = 6004

Total Case reported in 2020 = 154

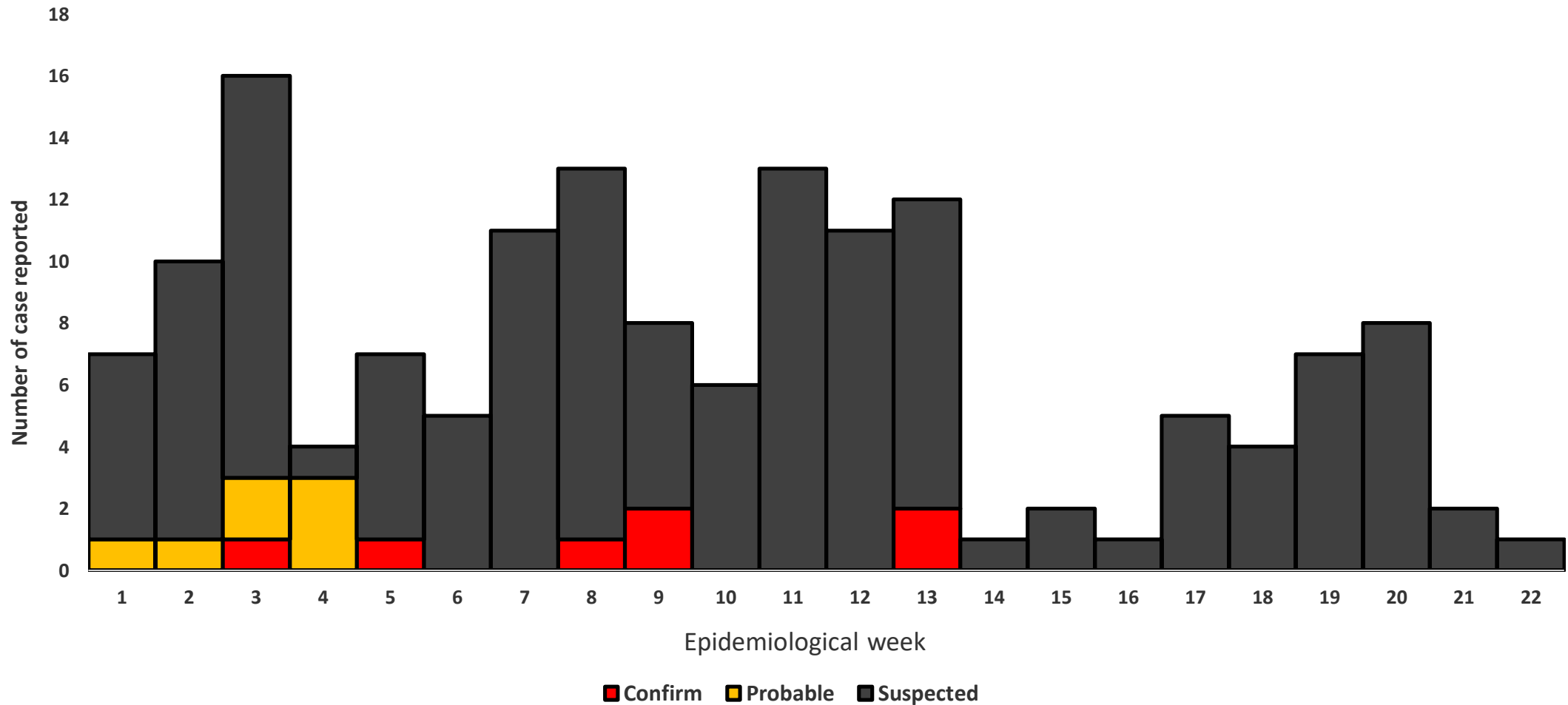
- Confirmed = 7
- Probable = 7
- Suspected = 140

Last confirmed case was reported in Week 13 (24 March 2020)

Total deaths reported is 47. Last death was reported on 25 October 2019

Diphtheria

Total number of diphtheria case reported in EWARS from week 1-22, 2020

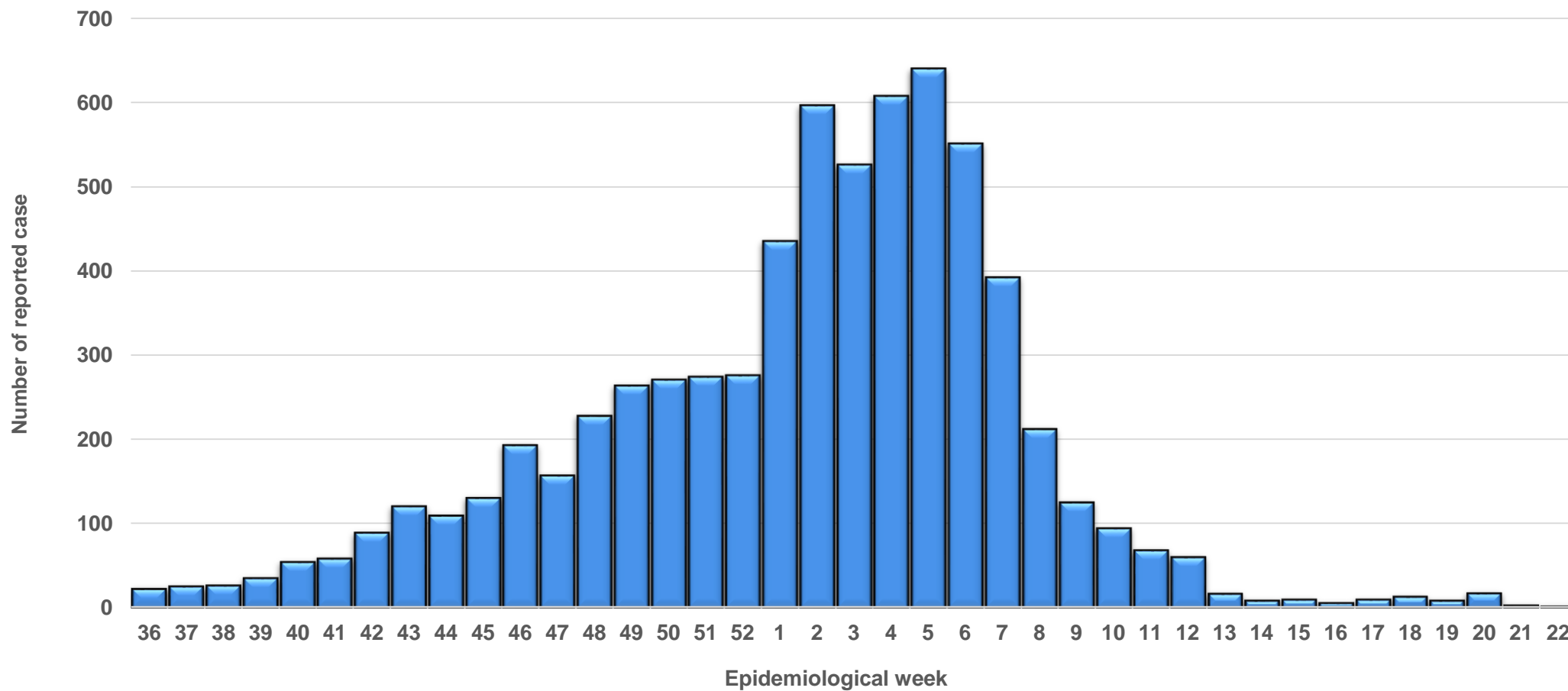


Measles

- Total 1 suspected measles case reported through in week 22
- Total cases reported in 2020
 - 4360 through aggregated weekly reporting
 - 56% (2,443) captured by case based surveillance

Measles

Total number of Measles case reported in EWARS from week 36, 2019 to week 22, 2020



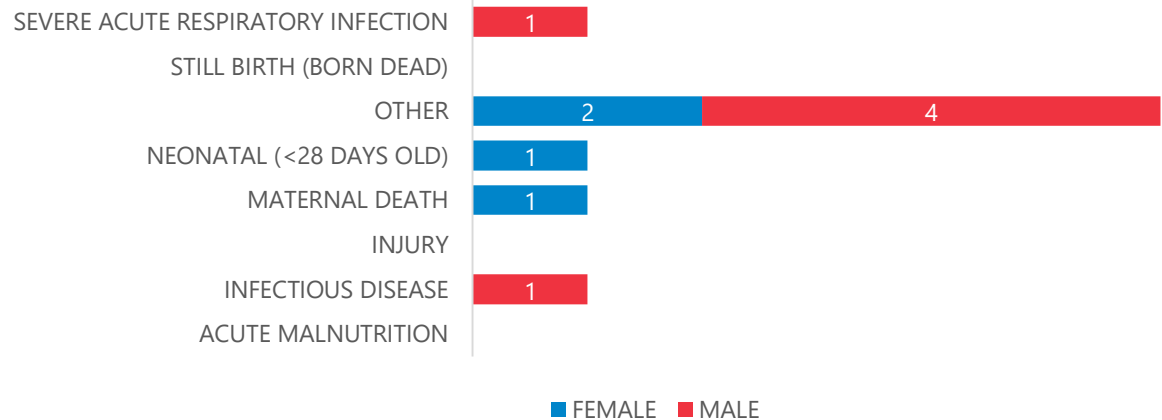
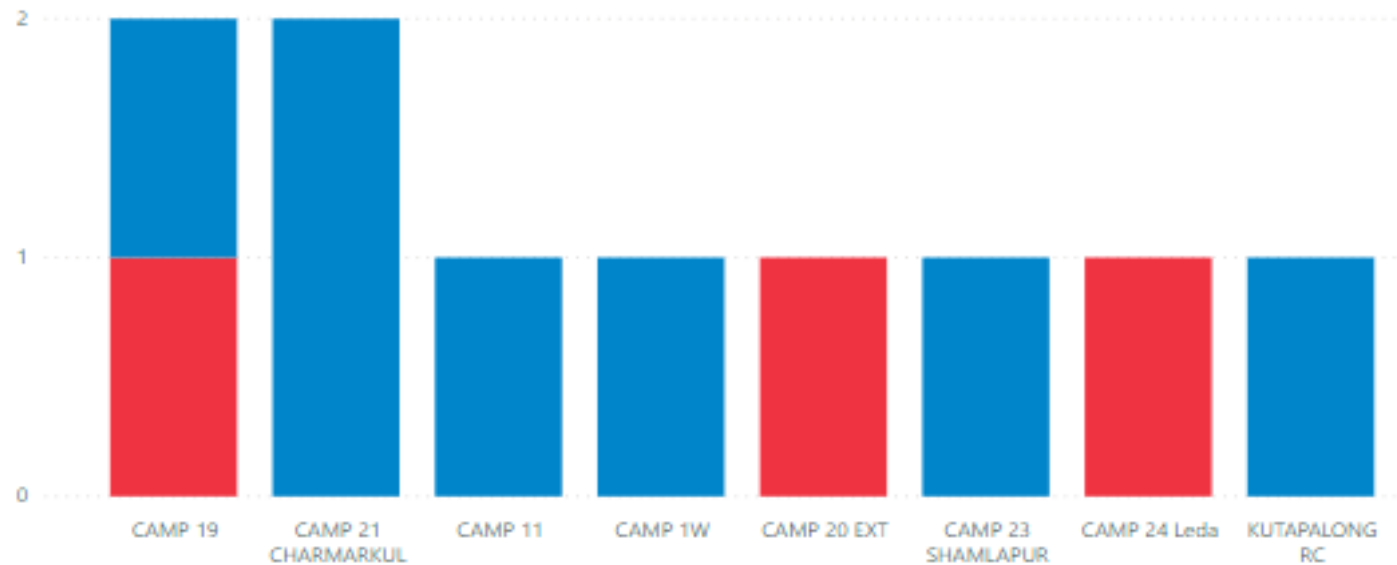
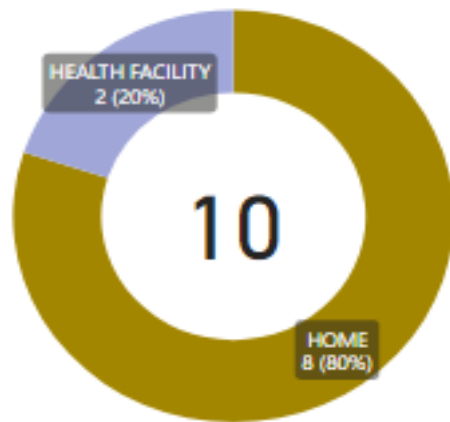
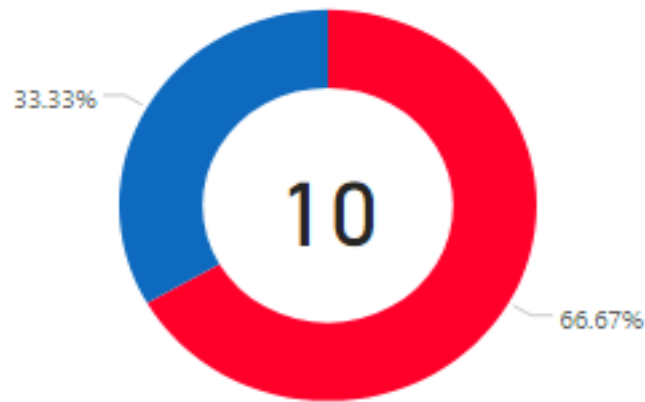
Diarrhoeal Disease

- A total 1 538 cases of diarrhoeal diseases reported in EWARS in week 22
- Among which 1074 cases (5.5%) reported as acute watery diarrhoea (AWD), 362 (1.9%) and 102 (0.5%) cases as other diarrhea and bloody diarrhea respectively.
- Diarrhoeal diseases are the second highest contributor of proportional morbidity after acute respiratory infection (ARI).

Community-based surveillance

- In week 22 total of 10 deaths were recorded due to 6 causes classified as “Others” , 1 neonatal death, 1 infectious disease death, 1 maternal death and 1 death due to severe acute respiratory infection
- No mortality alert raised for women of reproductive age (12-49 years).
- 2 deaths reported from health facility and 8 from home
- We would like to urge donor agencies to inform their partners to report **all mortalities** into EWARS using the “Community-based mortality surveillance” form.

Community-based Surveillance



Bangladesh

Rohingya Emergency Response

Early Warning, Alert and
Response System (EWARS)

Epidemiological Bulletin W22 2020



Ministry of Health and Family
Welfare Bangladesh



World Health
Organization



HEALTH SECTOR
COX'S BAZAR



Printed: 09:46 Wednesday, 03 June 2020 UTC

Contents

Highlights

Slide 1	Table 1 Coverage
	Table 2 Early warning performance
	Table 3 Alert performance

Early Warning

Slide 2	Map 1a Ukhia completeness by site/zone
	Map 1b Teknaf completeness by site/zone
Slide 3	Table 4 Ukhia (Northern group) performance by site/zone
	Map 2 Ukhia (Northern group) completeness by site/zone
Slide 4	Table 5 Ukhia (Southern group) performance by site/zone
	Map 3 Ukhia (Southern group) completeness by site/zone
Slide 5	Table 6 Teknaf performance by site/zone
	Map 4 Teknaf completeness by site/zone
Slide 6	Table 7 Performance by partner

Alert

Slide 7	Table 8 Ukhia (Northern group) alerts by site/zone
	Map 5 Ukhia (Northern group) alerts site/zone
Slide 8	Table 9 Ukhia (Southern group) alerts by site/zone
	Map 6 Ukhia (Southern group) alerts site/zone
Slide 9	Table 10 Teknaf alerts by site/zone
	Map 7 Teknaf alerts site/zone
Slide 10	Table 11 Performance by type of alert
	Table 12 Risk Assessment

Sources of data

1. Weekly EWARS Reporting Form
2. Mortality Case Report Form
3. Event-based Surveillance Form

Highlights W22 2020

Table 1 | Coverage

#	%	
854,704	-	Estimated total Rohingya population ¹
854,704	100%	Total population under surveillance
166	-	Total number of health facilities
139	84%	Number of EWARS reporting sites

Table 2 | Early warning performance indicators

W22	Cumulative (2020)	
106	2973	Number of weekly reports received
73%	89%	Completeness
73%	82%	Timeliness

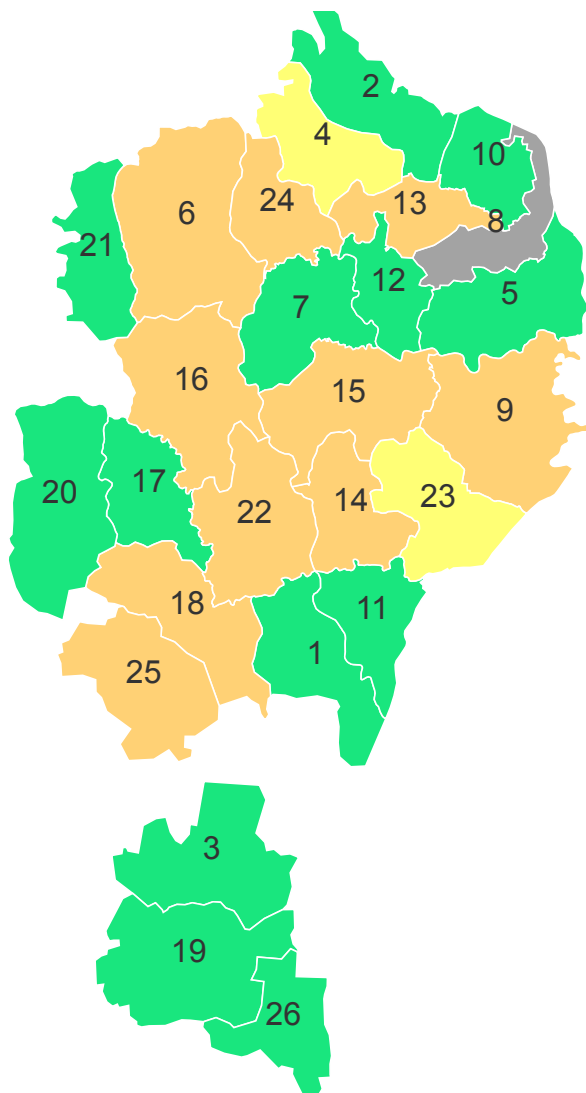
Table 3 Alert performance indicators

W22	Cumulative (2020)	
21	1,361	Total alerts raised
100%	100%	% verified
0%	0%	% auto-discarded
0%	0%	% undergoing risk assessment
0%	1%	% completed risk assessment

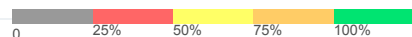
¹ Source: UNHCR. Bangladesh: Joint Government of Bangladesh- UNHCR Population Factsheet. 31 December 2019.

Map 1a | Ukhia completeness by camp

- 1 Camp 12
- 2 Camp 1E
- 3 Camp 14
- 4 Camp 1W
- 5 Camp 7
- 6 Camp 4
- 7 Camp 5
- 8 Camp 2E
- 9 Camp 8E
- 10 Kutupalong RC
- 11 Camp 11
- 12 Camp 6
- 13 Camp 2W
- 14 Camp 10
- 15 Camp 8W
- 16 Camp 17
- 17 Camp 20
- 18 Camp 19
- 19 Camp 15
- 20 Camp 20 Ext
- 21 Camp 4 Ext
- 22 Camp 18
- 23 Camp 9
- 24 Camp 3
- 25 Camp 13
- 26 Camp 16

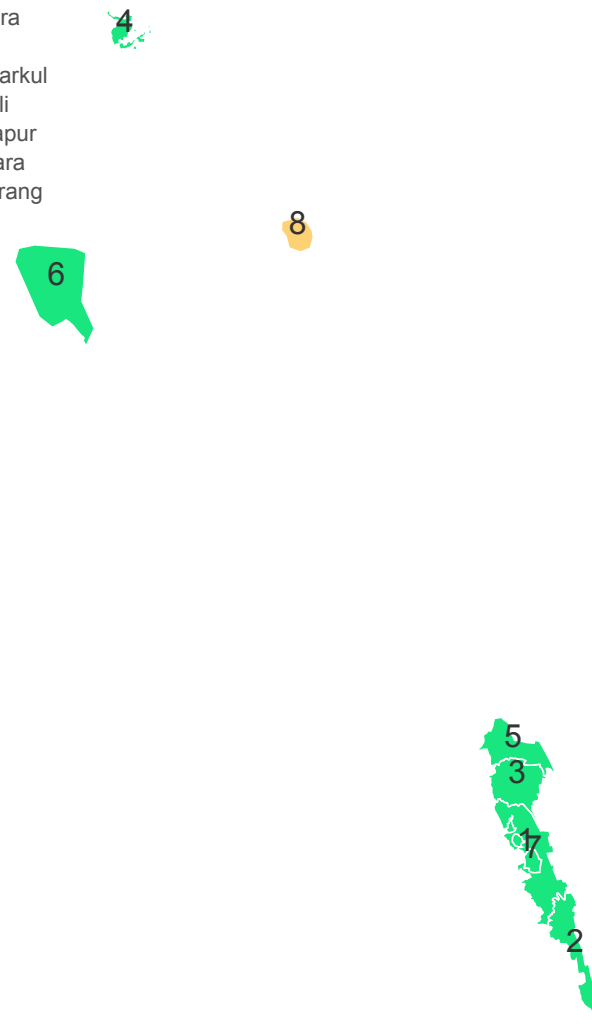


Completeness



Map 1b | Teknaf completeness by camp

- 1 Nayapara RC
- 2 Camp 27 Jadimura
- 3 Camp 24 Leda
- 4 Camp 21 Chakmarkul
- 5 Camp 25 Ali Khali
- 6 Camp 23 Shamlapur
- 7 Camp 26 Nayapara
- 8 Camp 22 Unchiprang



Completeness



Table 4 | Performance by camp (W22 2020)

Northern group	Reporting		Performance	
	# health facilities	# reports received	Completeness	Timeliness
Camp 1E	4	4	100%	100%
Camp 1W	3	1	33%	33%
Camp 2E	1	0	0%	0%
Camp 2W	2	1	50%	50%
Camp 3	6	4	67%	67%
Camp 4	6	4	60%	60%
Camp 4 Ext	1	1	100%	100%
Camp 5	4	3	75%	75%
Camp 6	2	2	100%	100%
Camp 7	5	5	100%	100%
Camp 8E	7	4	67%	67%
Camp 8W	7	4	57%	57%
Kutupalong RC	1	1	100%	100%

Map 2 | Completeness by camp

- 1 Camp 1E
- 2 Camp 1W
- 3 Camp 7
- 4 Camp 4
- 5 Camp 5
- 6 Camp 2E
- 7 Camp 8E
- 8 Kutupalong RC
- 9 Camp 6
- 10 Camp 2W
- 11 Camp 8W
- 12 Camp 4 Ext
- 13 Camp 3

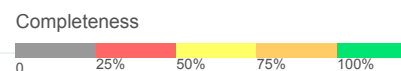
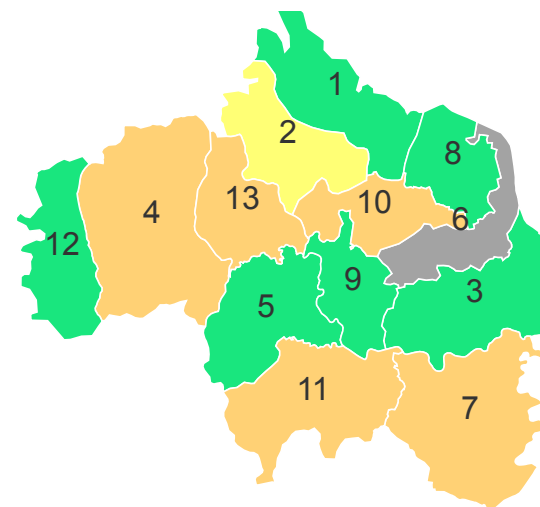


Table 5 | Performance by camp (W22 2020)

Southern group	Reporting		Performance	
	# health facilities	# reports received	Completeness	Timeliness
Camp 10	4	2	50%	50%
Camp 11	9	7	78%	78%
Camp 12	7	6	83%	83%
Camp 13	8	6	71%	71%
Camp 14	6	5	83%	83%
Camp 15	11	7	78%	78%
Camp 16	6	5	83%	83%
Camp 17	5	3	60%	60%
Camp 18	5	3	60%	60%
Camp 19	5	3	60%	60%
Camp 20	3	3	100%	100%
Camp 20 Ext	1	1	100%	100%
Camp 9	7	2	40%	40%

Map 3 | Completeness by camp

- 1 Camp 12
- 2 Camp 14
- 3 Camp 11
- 4 Camp 10
- 5 Camp 17
- 6 Camp 20
- 7 Camp 19
- 8 Camp 15
- 9 Camp 20 Ext
- 10 Camp 18
- 11 Camp 9
- 12 Camp 13
- 13 Camp 16

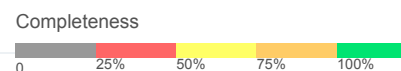
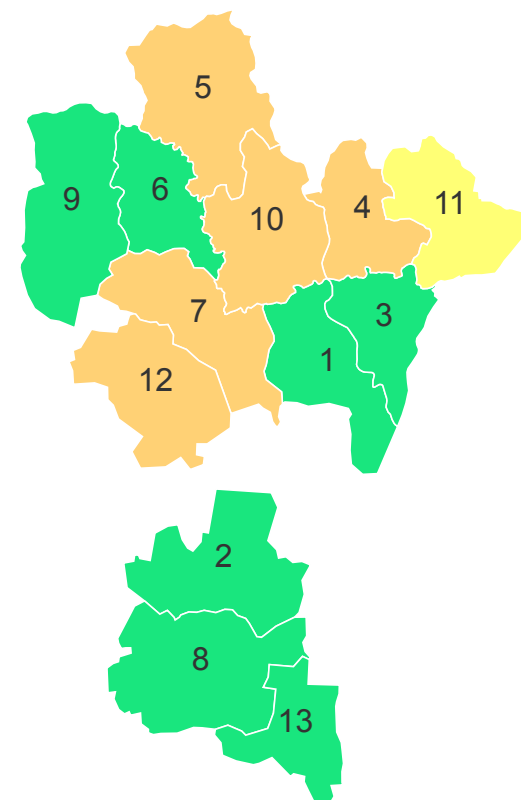
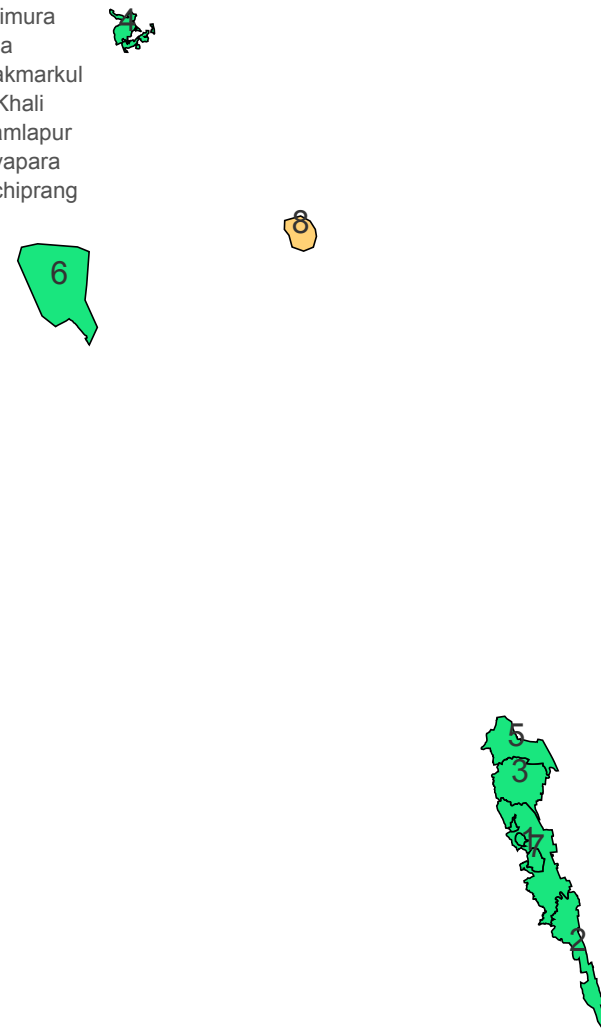


Table 6 | Performance by camp (W22 2020)

Teknaf	Reporting		Performance	
	# health facilities	# reports received	Completeness	Timeliness
Camp 21 Chakmarkul	4	4	100%	100%
Camp 22 Unchiprang	4	2	67%	67%
Camp 23 Shamlapur	4	3	100%	100%
Camp 24 Leda	1	1	100%	100%
Camp 25 Ali Khali	3	3	100%	100%
Camp 26 Nayapara	1	1	100%	100%
Camp 27 Jadimura	1	1	100%	100%
Nayapara RC	2	2	100%	100%

Map 4 | Completeness by camp

- 1 Nayapara RC
- 2 Camp 27 Jadimura
- 3 Camp 24 Leda
- 4 Camp 21 Chakmarkul
- 5 Camp 25 Ali Khali
- 6 Camp 23 Shamlapur
- 7 Camp 26 Nayapara
- 8 Camp 22 Unchiprang



Completeness



Table 7 | Performance by partner (W22 2020)

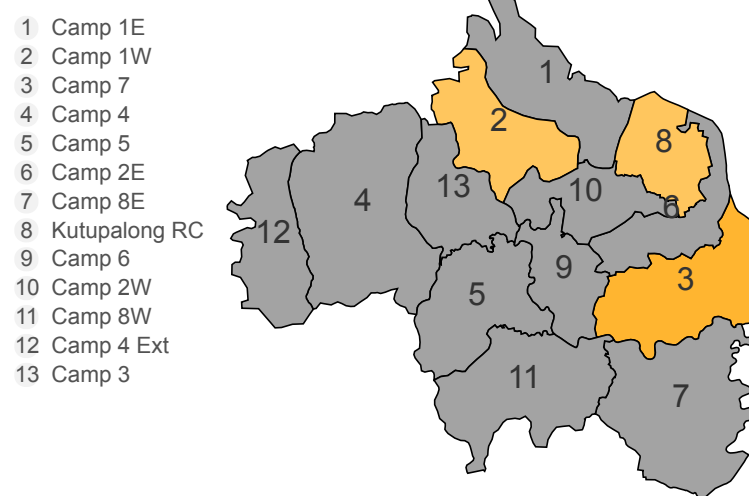
Partner	Performance		Reporting	
	# sites	# reports received	Completeness	Timeliness
BDRCS	4	3	75%	75%
BRAC	11	11	100%	100%
CARE	4	4	100%	100%
FHM	1	0	0%	0%
FRNDS	12	12	100%	100%
GK	9	10	111%	111%
HMBDF	1	1	100%	100%
IOM	15	12	80%	80%
IRC	2	2	100%	100%
MSF	8	4	50%	50%
MoH	0	1	0%	0%
Hope	2	2	100%	100%
Medair	1	1	100%	100%

Partner	Performance		Reporting	
	# sites	# reports received	Completeness	Timeliness
FH/MTI	3	2	67%	67%
PHD	9	0	0%	0%
PWJ	1	1	100%	100%
RHU	3	3	100%	100%
RI	3	3	100%	100%
RTMI	9	6	67%	67%
SCI	9	9	100%	100%
TdH	1	1	100%	100%

Table 8 | Performance by camp

Northern group	W22		Cumulative (2020)	
	# alerts	% verif.	# alerts	% verif.
Camp 1E	0	0%	35	100%
Camp 1W	1	100%	15	100%
Camp 2E	0	0%	35	100%
Camp 2W	0	0%	35	100%
Camp 3	0	0%	102	100%
Camp 4	0	0%	93	100%
Camp 4 Ext	0	0%	11	100%
Camp 5	0	0%	72	100%
Camp 6	0	0%	14	100%
Camp 7	3	100%	25	100%
Camp 8E	0	0%	18	100%
Camp 8W	0	0%	60	98%
Kutupalong RC	2	100%	10	100%

Map 5 | Number of alerts by camp



of alerts

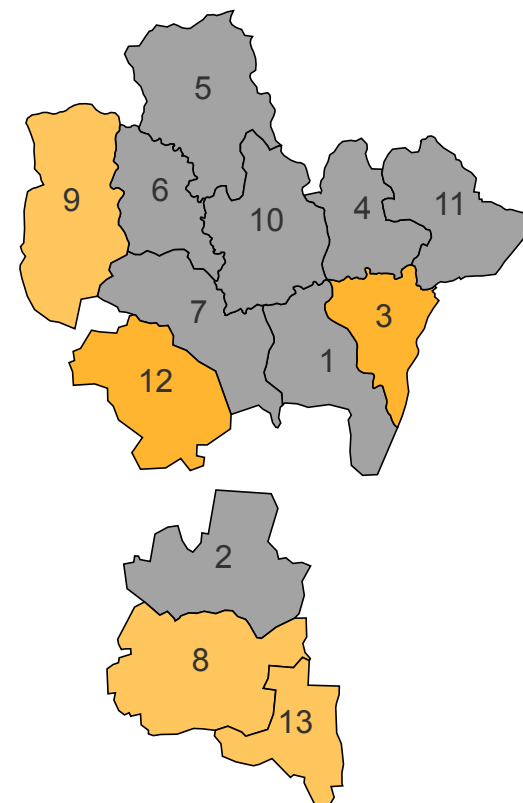


Table 9 | Performance by camp

Southern group	W22		Cumulative (2020)	
	# alerts	% verif.	# alerts	% verif.
Camp 10	0	0%	36	100%
Camp 11	3	100%	52	100%
Camp 12	0	0%	75	100%
Camp 13	3	100%	59	100%
Camp 14	0	0%	48	100%
Camp 15	1	100%	73	100%
Camp 16	1	100%	76	96%
Camp 17	0	0%	36	100%
Camp 18	0	0%	38	100%
Camp 19	0	0%	45	100%
Camp 20	0	0%	38	100%
Camp 20 Ext	1	100%	7	100%
Camp 9	0	0%	64	100%

Map 6 | Number of alerts by camp

- 1 Camp 12
- 2 Camp 14
- 3 Camp 11
- 4 Camp 10
- 5 Camp 17
- 6 Camp 20
- 7 Camp 19
- 8 Camp 15
- 9 Camp 20 Ext
- 10 Camp 18
- 11 Camp 9
- 12 Camp 13
- 13 Camp 16



of alerts



Table 10 | Performance by camp

Teknaf	W22		Cumulative (2020)	
	# alerts	% verif.	# alerts	% verif.
Camp 21 Chakmarkul	1	100%	33	100%
Camp 22 Unchiprang	0	0%	12	100%
Camp 23 Shamlapur	2	100%	16	100%
Camp 24 Leda	0	0%	16	100%
Camp 25 Ali Khali	0	0%	12	100%
Camp 26 Nayapara	0	0%	42	100%
Camp 27 Jadimura	0	0%	12	100%
Nayapara RC	0	0%	11	100%

Map 7 | Number of alerts by camp

- 1

Nayapara RC
- 2

Camp 27 Jadimura
- 3

Camp 24 Leda
- 4

Camp 21 Chakmarkul
- 5

Camp 25 Ali Khali
- 6

Camp 23 Shamlapur
- 7

Camp 26 Nayapara
- 8

Camp 22 Unchiprang

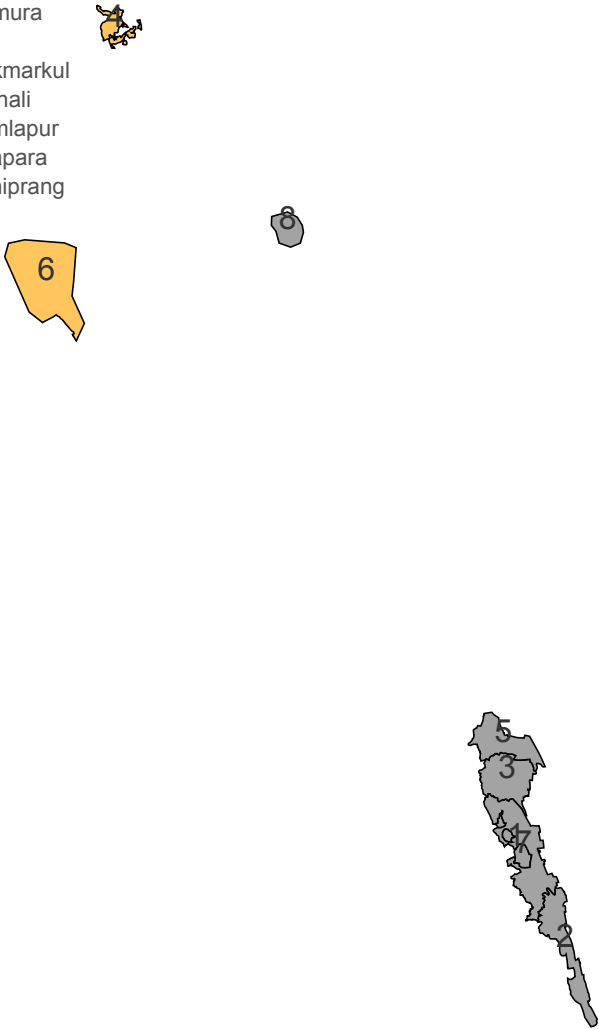


Table 11 | Performance by type of alert

Event	W22		Cumulative (2020)	
	# alerts	% verif.	# alerts	% verif.
Indicator-based surveillance				
Malaria	0	0%	0	0%
Measles	1	100%	647	100%
Bloody Diarr.	0	0%	0	0%
AFP	0	0%	5	100%
Meningitis	0	0%	10	100%
Haem. fever (susp.)	0	0%	8	100%
NNT	0	0%	1	100%
Unexp. fever	3	100%	81	100%
AWD	3	100%	96	100%
ARI	1	100%	81	100%
AJS	0	0%	56	100%
Varicella (Susp.)	0	0%	10	100%
Suspected COVID-19	0	0%	0	0%
Event-based surveillance				
EBS total	4	100%	86	100%

Table 12 | Risk assessment

W22	Cumulative (2020)	
0	16	Low risk
0	0	Moderate risk
0	0	High risk
0	0	Very high risk

For more help and support, please contact:

Dr. Shownam Barua
Medical Officer - Civil Surgeon Office (MO-CS)
Ministry of Health and Family Welfare
Cox's Bazar, Bangladesh

Telephone: +88 01723350483

Email: bshownam49@gmail.com

Dr. Md. Sabbir Hossain
Surveillance & Outbreak Officer
World Health Organization
Cox's Bazar, Bangladesh

Telephone: +88 017 1355 9987

Email: mds@who.int

Notes

WHO and the Ministry of Health and Family Welfare gratefully acknowledge all partners who have reported the data used in this bulletin.

The data been collected with support from the EWARS project. This is an initiative to strengthen early warning, alert and response in emergencies. It includes an online, desktop and mobile application that can be rapidly configured and deployed in the field. It is designed with frontline users in mind, and built to work in difficult and remote operating environments. This bulletin has been automatically published from the EWARS application.

More information can be found at <http://ewars-project.org>

Sign up for an account with EWARS Bangladesh at <http://bd.ewars.ws>



Ministry of
Health and
Family
Welfare
Bangladesh



World Health
Organization



HEALTH SECTOR
COX'S BAZAR



Global
EWARS

Bangladesh

Rohingya Emergency Response

Early Warning, Alert and
Response System (EWARS)

Annex W22 2020



Ministry of Health and Family
Welfare Bangladesh



World Health
Organization



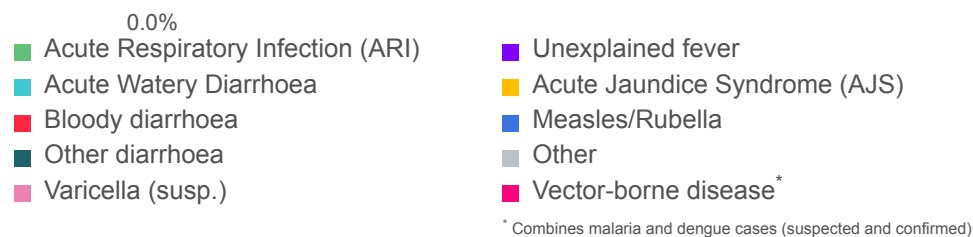
HEALTH SECTOR
COX'S BAZAR



Printed: 09:50 Wednesday, 03 June 2020 UTC

Proportional morbidity

Figure 1 | Proportional morbidity (W22 2020)



Disease	W22		2020	
	# cases	% morbidity	# cases	% morbidity
AWD	1,074	5.5%	51,714	4.4%
Bloody diarr.	102	0.5%	6,909	0.6%
Other diarr.	362	1.9%	21,458	1.8%
Susp. Varicella	24	0.1%	1,337	0.1%
ARI	2,366	12.2%	279,263	23.5%
Measles/Rub.	1	0.0%	4,360	0.4%
AFP	0	0.0%	5	0.0%
Susp. menin.	0	0.0%	33	0.0%
AJS	0	0.0%	457	0.0%
Susp. HF	0	0.0%	12	0.0%
Neo. tetanus	0	0.0%	1	0.0%
Adult tetanus	0	0.0%	1	0.0%
Malaria (conf.)	0	0.0%	6	0.0%
Malaria (susp.)	135	0.7%	708	0.1%
Dengue (conf.)	0	0.0%	2	0.0%
Dengue (susp.)	0	0.0%	6	0.0%
Unexpl. fever	643	3.3%	23,370	2.0%
Sev. Malnut.	2	0.0%	558	0.0%
Inj./Wounds	680	3.5%	32,179	2.7%
Other	14,038	72.3%	765,745	64.4%
Total	18,785	100%	1,188,577	100%

Trend in consultations and key diseases

Figure 2 | Trend in proportional morbidity for key diseases (W22)

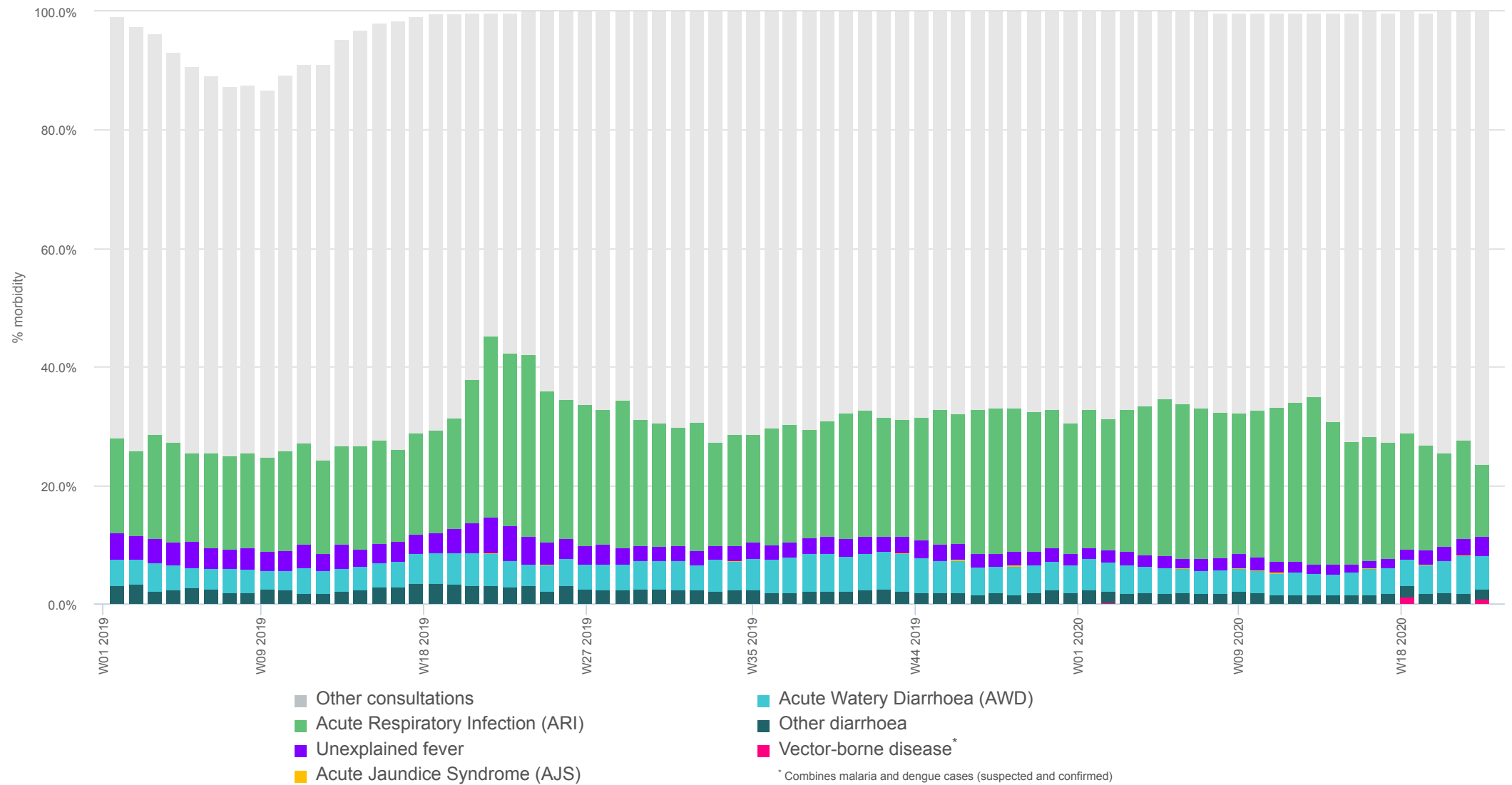
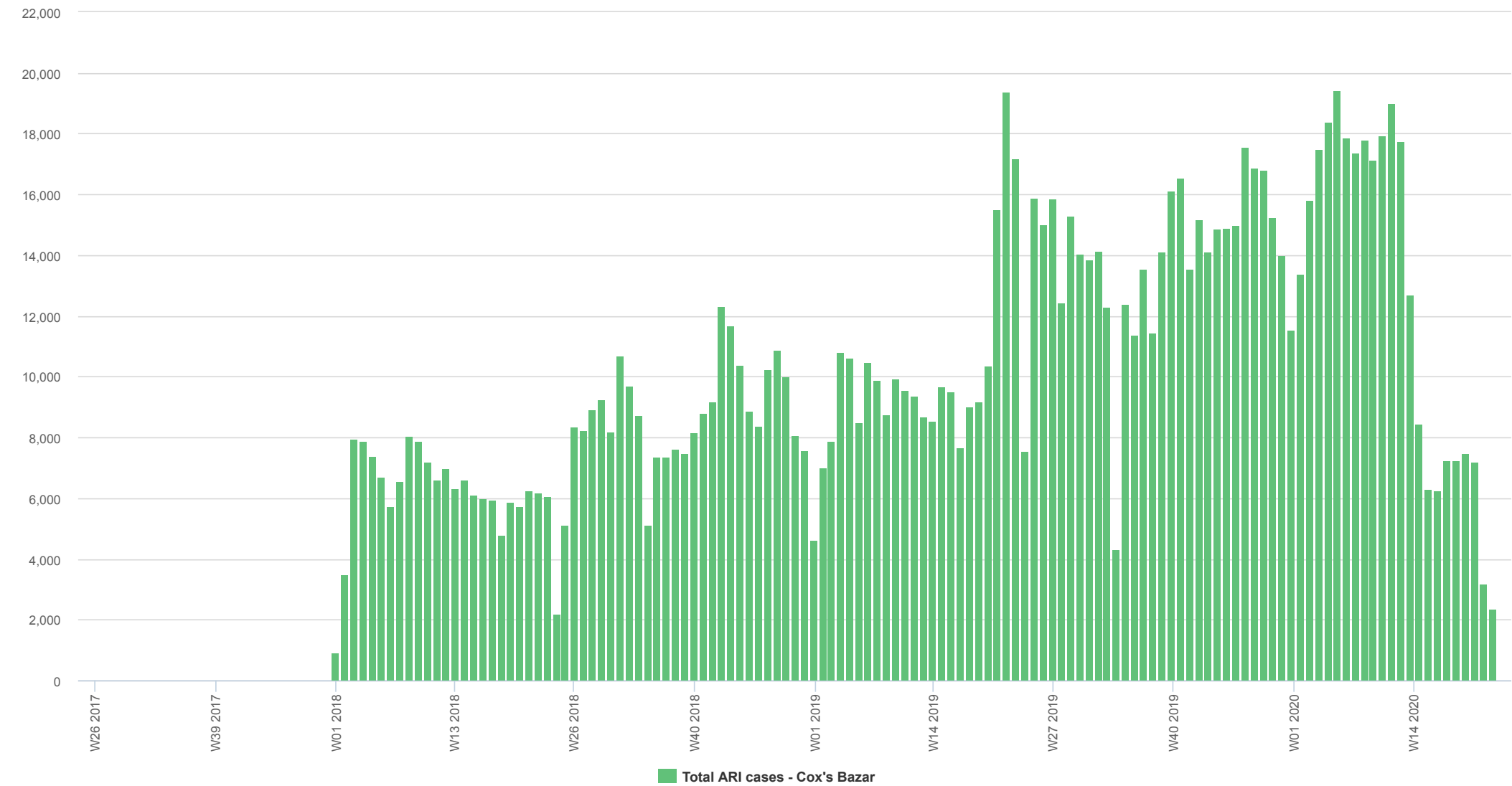
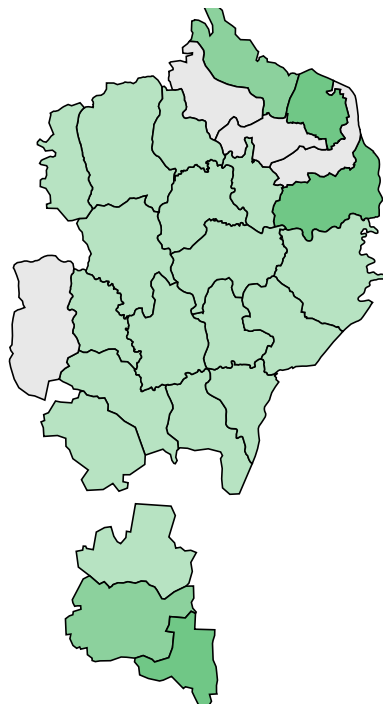


Figure 3 | Trend in number of cases over time (W38 2017 - W22 2020)

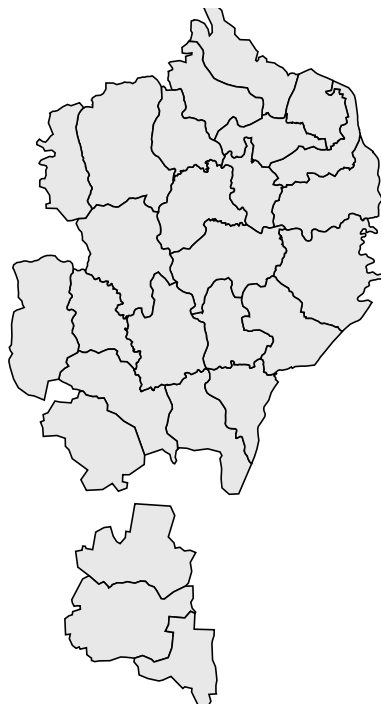


Map 1 | Map of cases by camp (W22 2020)

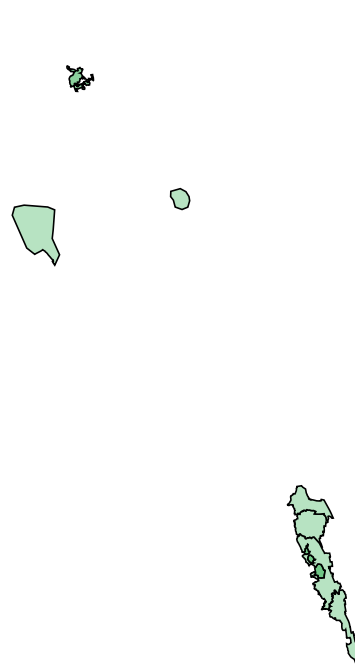
a. Ukhia | Number of cases



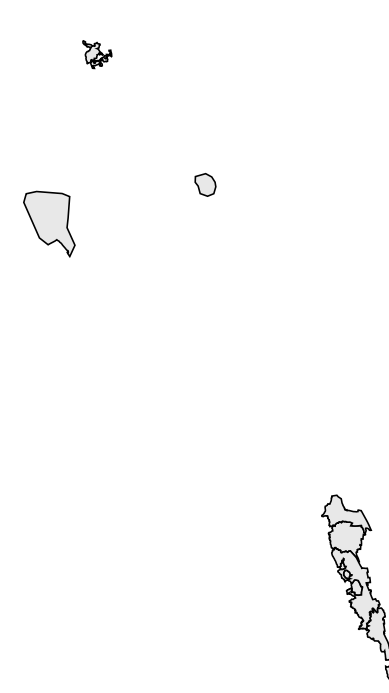
b. Ukhia | Number of alerts



c. Teknaf | Number of cases



d. Teknaf | Number of alerts



Map legend

Number of cases



Number of alerts



Alert threshold

Twice the average number of cases over the past 3 weeks. *Source: IEDCR*

Alert management (W22 2020)

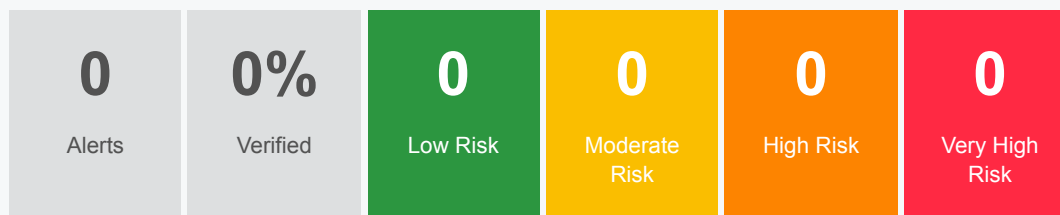
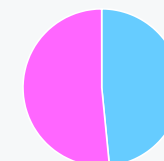
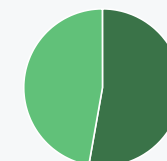


Figure | % sex



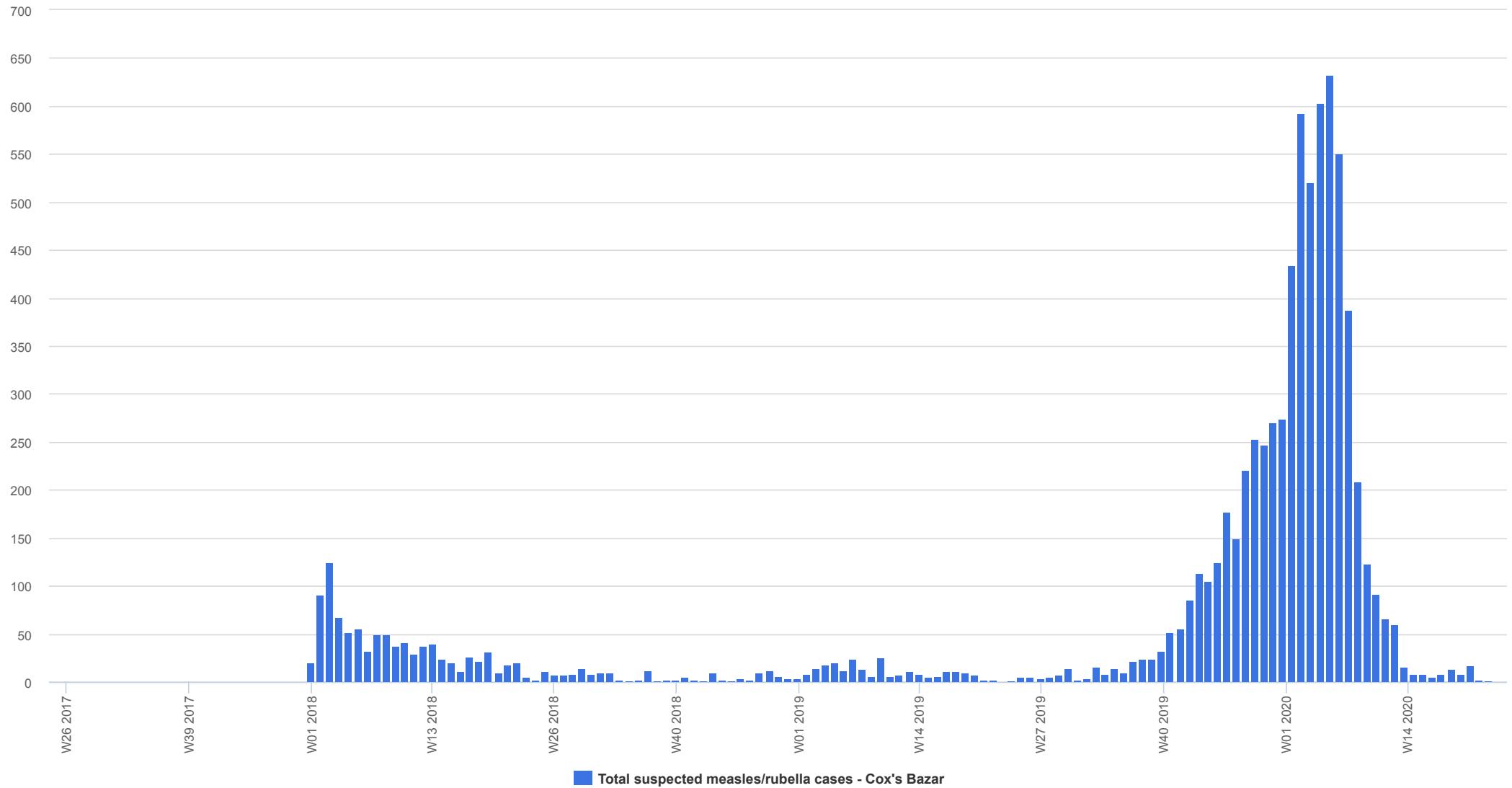
Male Female

Figure | % age



>=5 < 5

Figure 4 | Trend in number of suspected cases over time (W38 2017 - W22 2020)



Map 2 | Map of cases by camp (W22 2020)

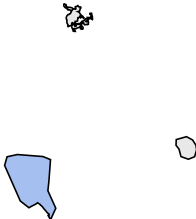
a. Ukhia | Number of cases



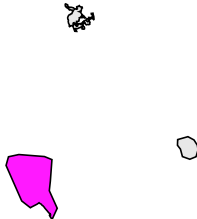
b. Ukhia | Number of alerts



c. Teknaf | Number of cases



d. Teknaf | Number of alerts



Map legend



Alert threshold
1 case. Source: IEDCR

Alert management (W22 2020)

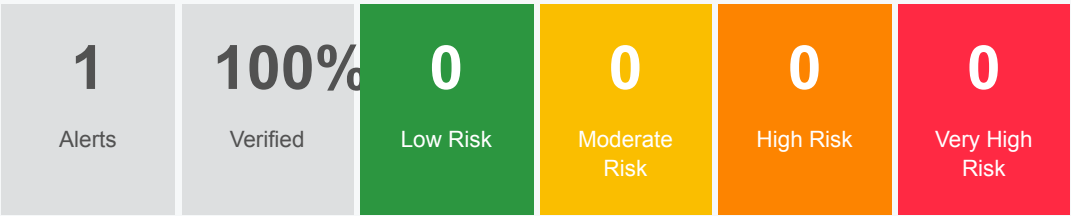


Figure | % sex

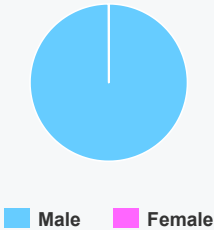


Figure | % age

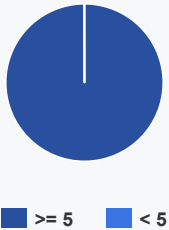
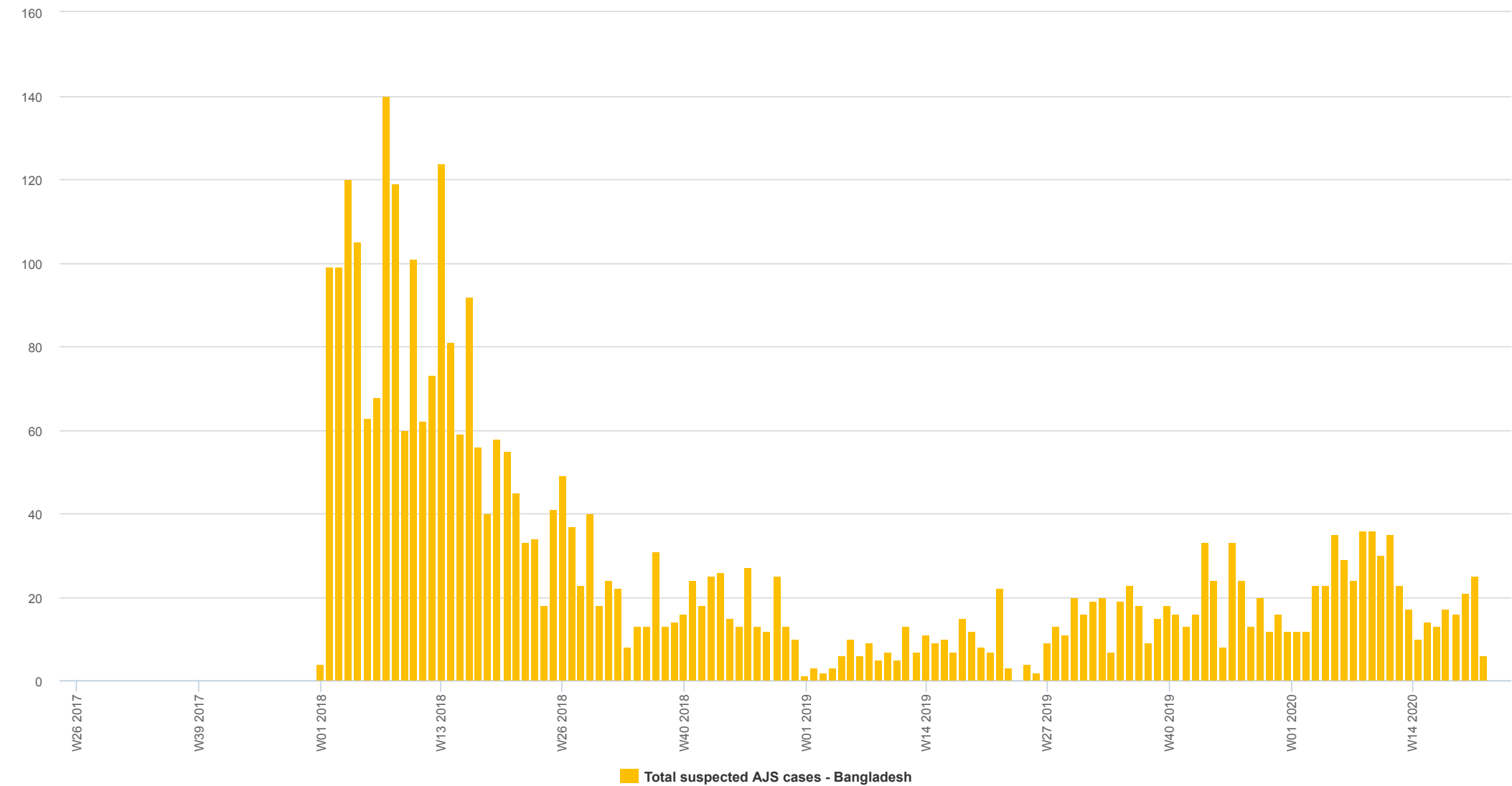


Figure 5 | Trend in number of cases over time (W38 2017 - W22 2020)



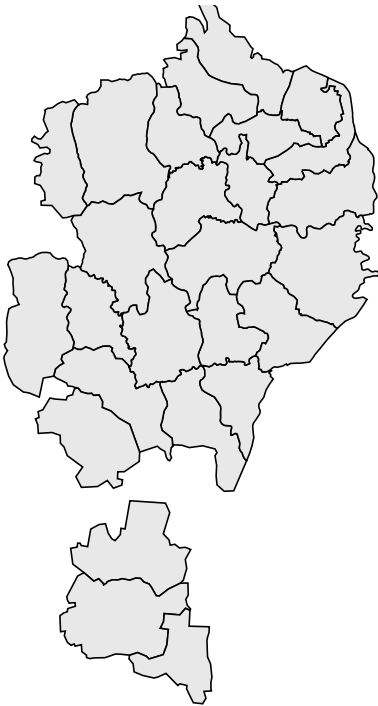
Total suspected AJS cases - Bangladesh

Map 3 | Map of cases by camp (W37 2017 - W22 2020)

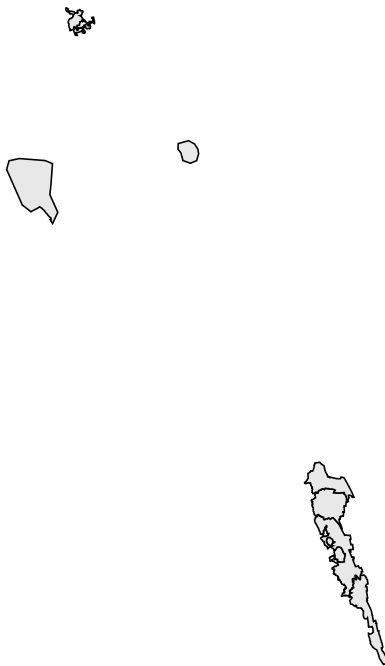
a. Ukhia | Number of cases



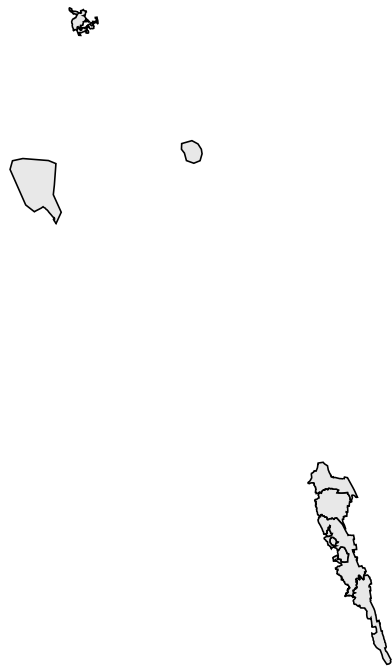
b. Ukhia | Number of alerts



c. Teknaf | Number of cases

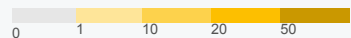


d. Teknaf | Number of alerts



Map legend

Number of cases



Number of alerts



Alert threshold

A cluster of 3 or more cases seen in a health facility. *Source: IEDCR*

Alert management (W22 2020)

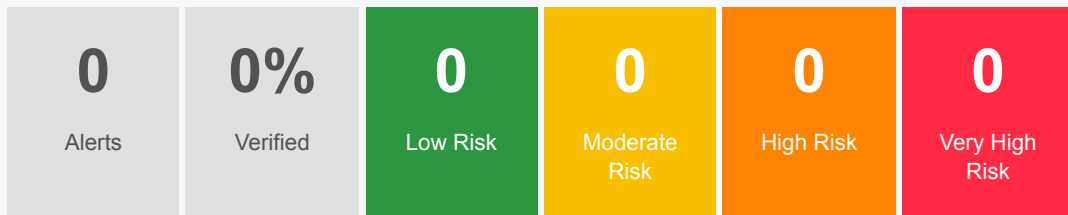
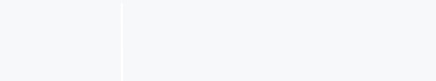


Figure | % sex



Male Female

Figure | % age



>= 5 < 5

Figure 6 | Trend in number of cases over time (W38 2017 - W22 2020)

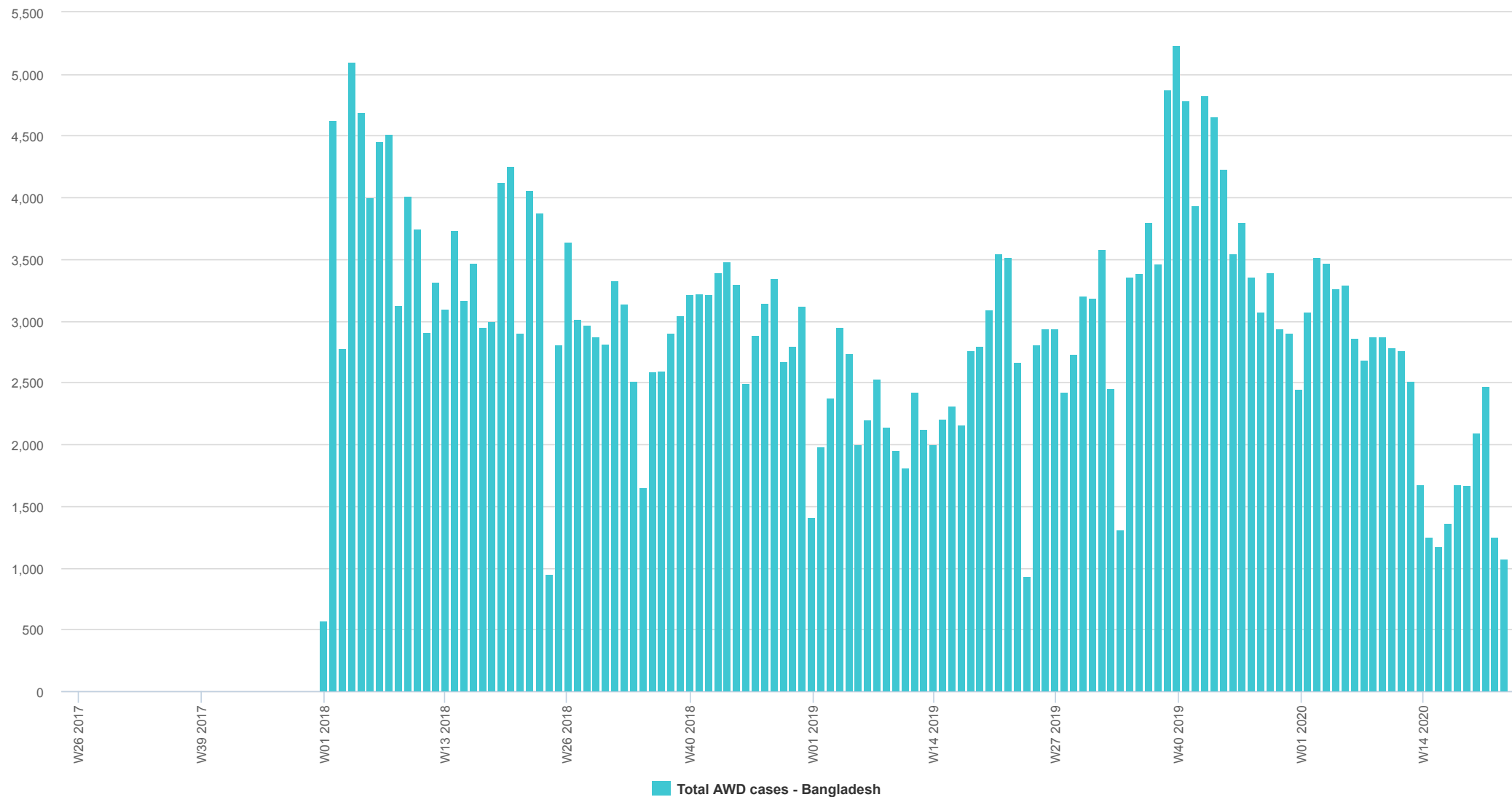
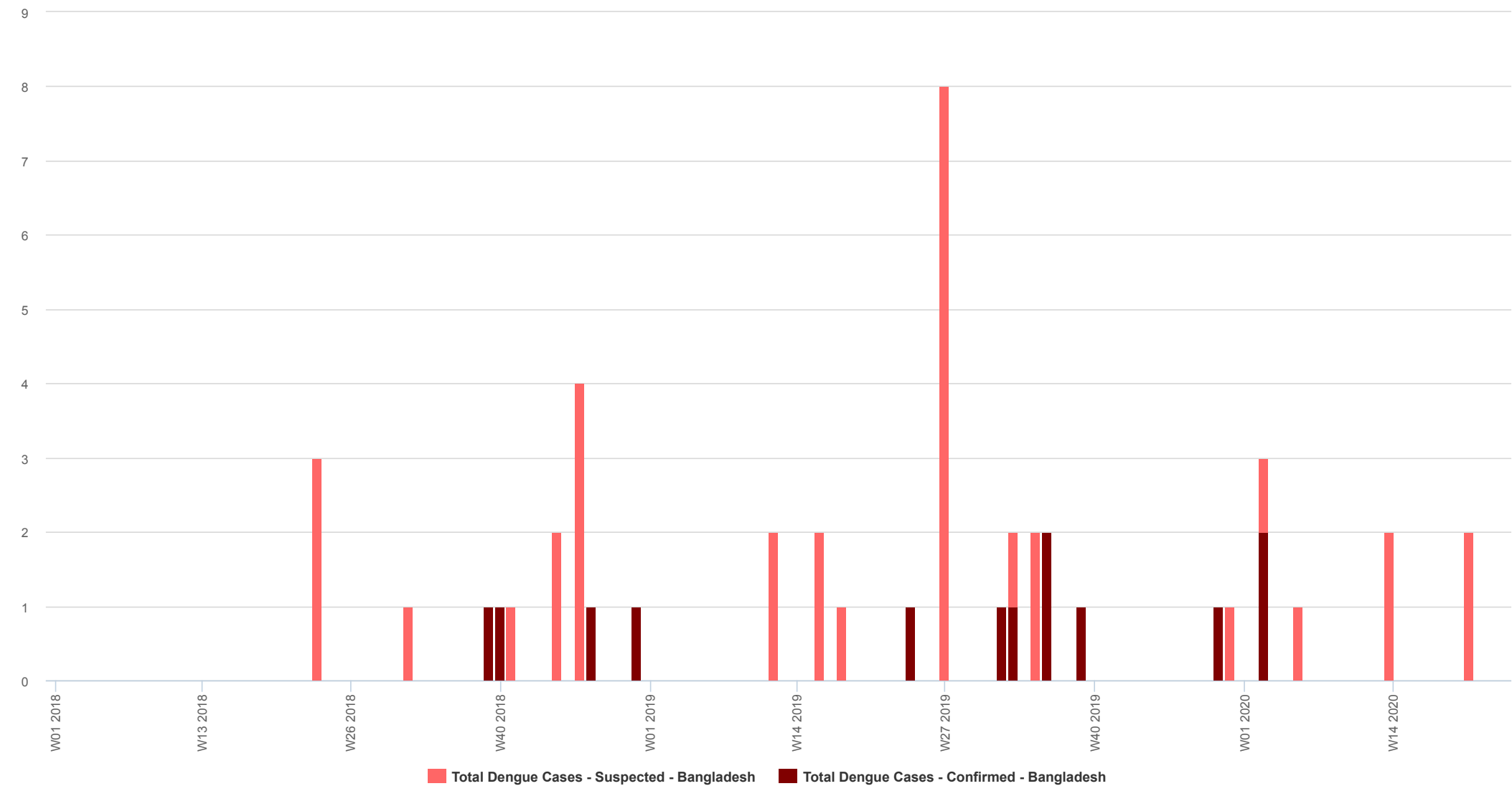


Figure 7 | Trend in number of cases over time (W38 2017 - W22 2020)

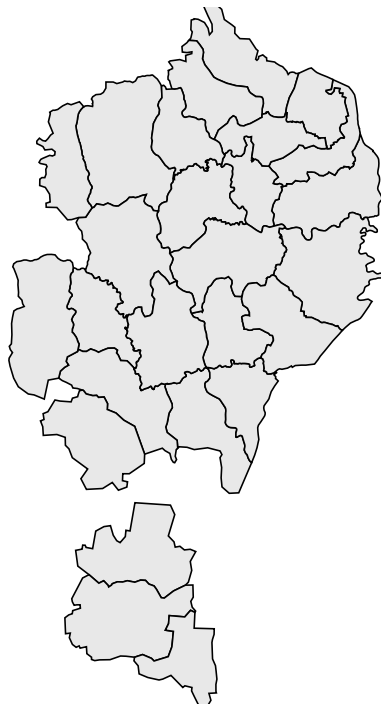


Map 4 | Map of cases by camp (W37 2017 - W22 2020)

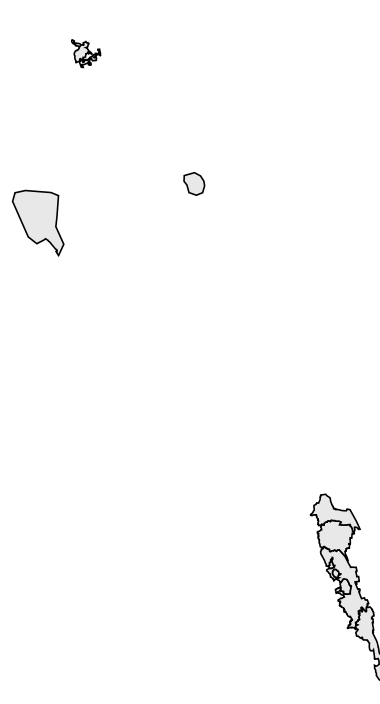
a. Ukhia | Number of cases



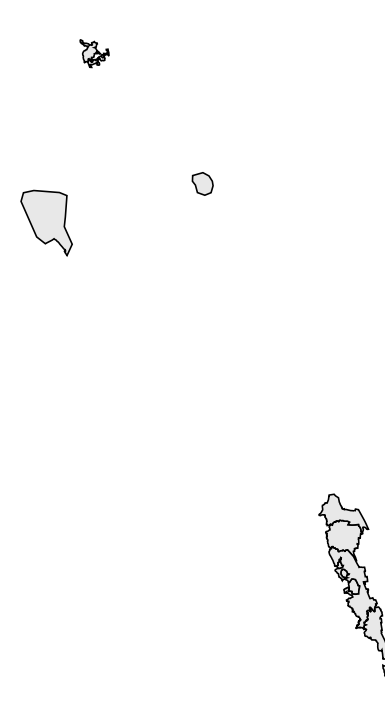
b. Ukhia | Number of alerts



c. Teknaf | Number of cases

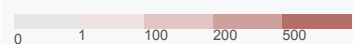


d. Teknaf | Number of alerts



Map legend

Number of cases



Number of alerts



Alert threshold

Twice the average number of cases over the past 3 weeks. *Source: IEDCR*

Alert management (W22 2020)

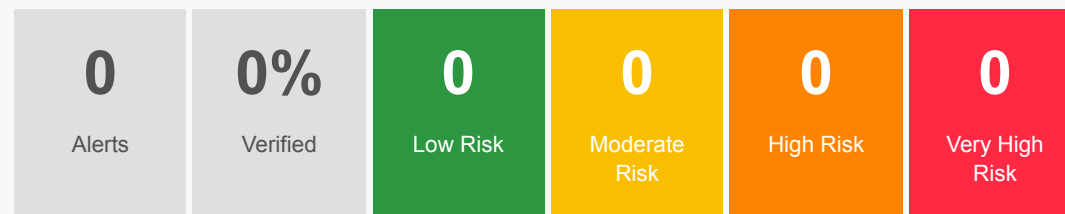


Figure | % sex



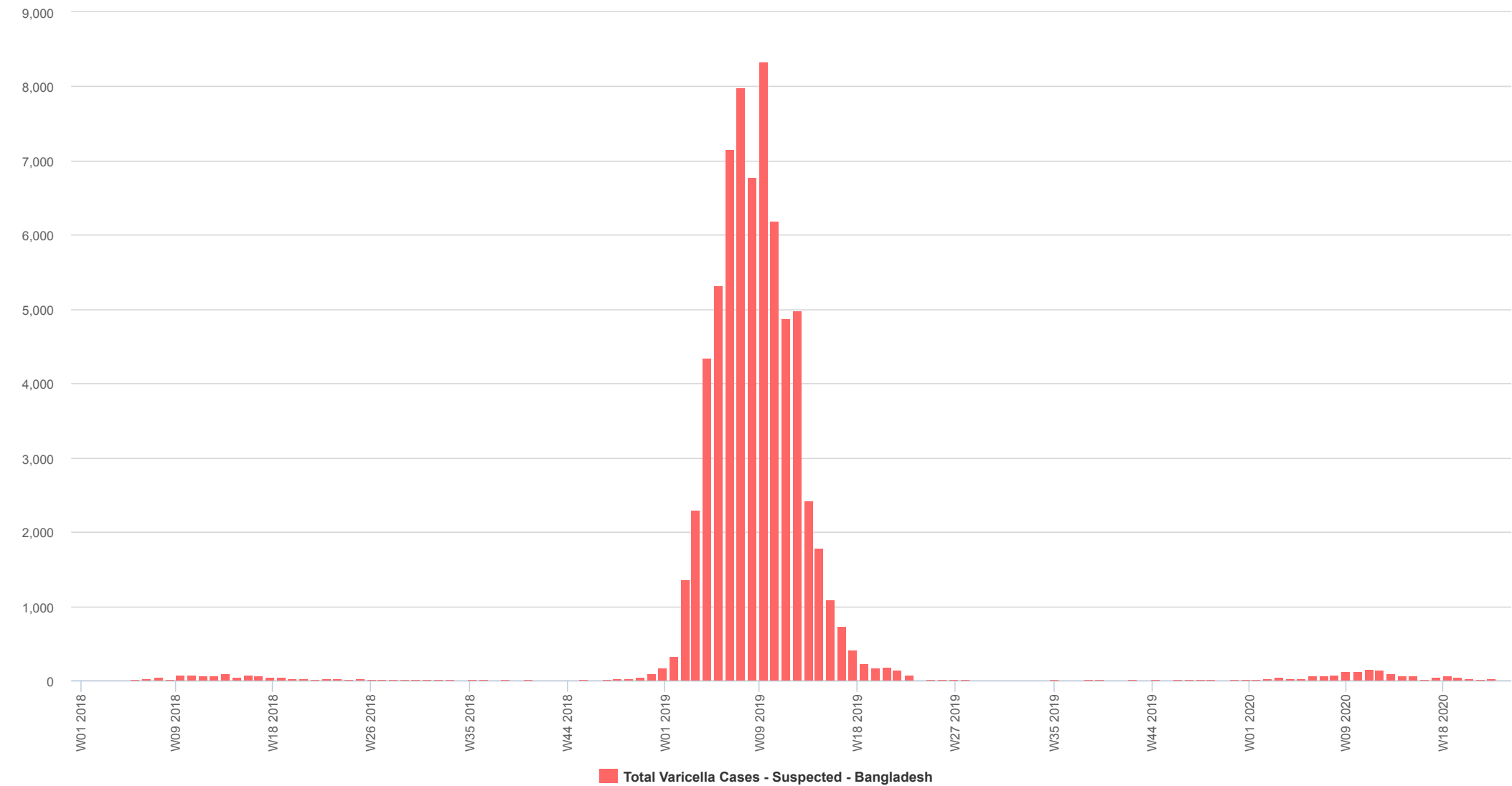
Male Female

Figure | % age



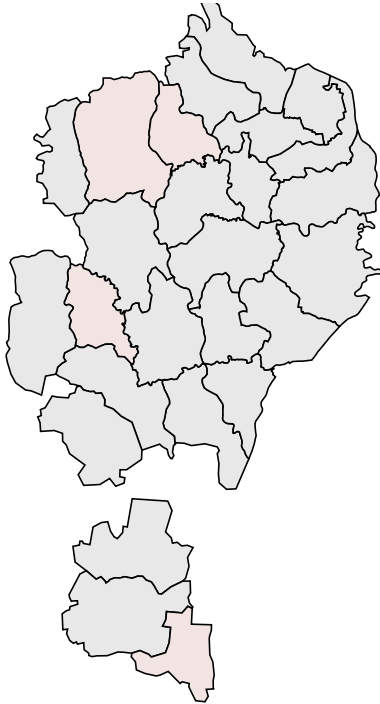
>= 5 < 5

Figure 7 | Trend in number of cases over time (W38 2017 - W22 2020)

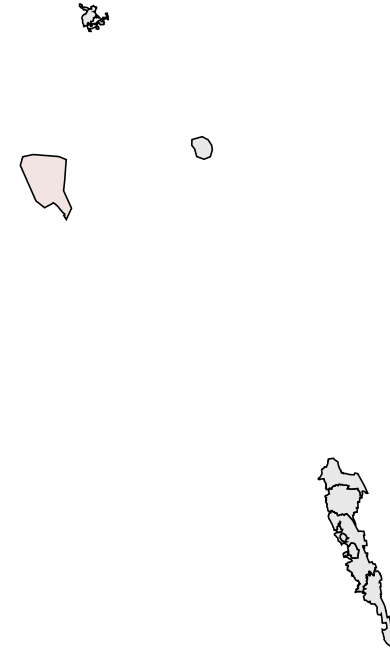


Map 4 | Map of cases by camp (W37 2017 - W22 2020)

a. Ukhia | Number of cases



c. Teknaf | Number of cases



Map legend

Number of cases

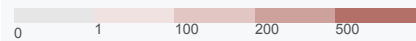
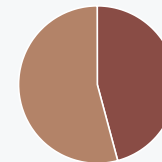


Figure | % sex



Male Female

Figure | % age



>= 5 < 5

For more help and support, please contact:

Dr. Shownam Barua
Medical Officer - Civil Surgeon Office (MO-CS)
Ministry of Health and Family Welfare
Cox's Bazar, Bangladesh

Telephone: +88 01723350483

Email: bshownam49@gmail.com

Dr. Md. Sabbir Hossain
Surveillance & Outbreak Officer
World Health Organization
Cox's Bazar, Bangladesh

Telephone: +88 017 1355 9987

Email: mds@who.int

Notes

WHO and the Ministry of Health and Family Welfare gratefully acknowledge all partners who have reported the data used in this bulletin.

The data been collected with support from the EWARS project. This is an initiative to strengthen early warning, alert and response in emergencies. It includes an online, desktop and mobile application that can be rapidly configured and deployed in the field. It is designed with frontline users in mind, and built to work in difficult and remote operating environments. This bulletin has been automatically published from the EWARS application.

More information can be found at <http://ewars-project.org>

Sign up for an account with EWARS Bangladesh at <http://bd.ewars.ws>



Ministry of
Health and
Family
Welfare
Bangladesh



World Health
Organization



HEALTH SECTOR
COX'S BAZAR



Global

EWARS