



# Epidemiological Highlights

Week 46 (9-15 Nov 2020)



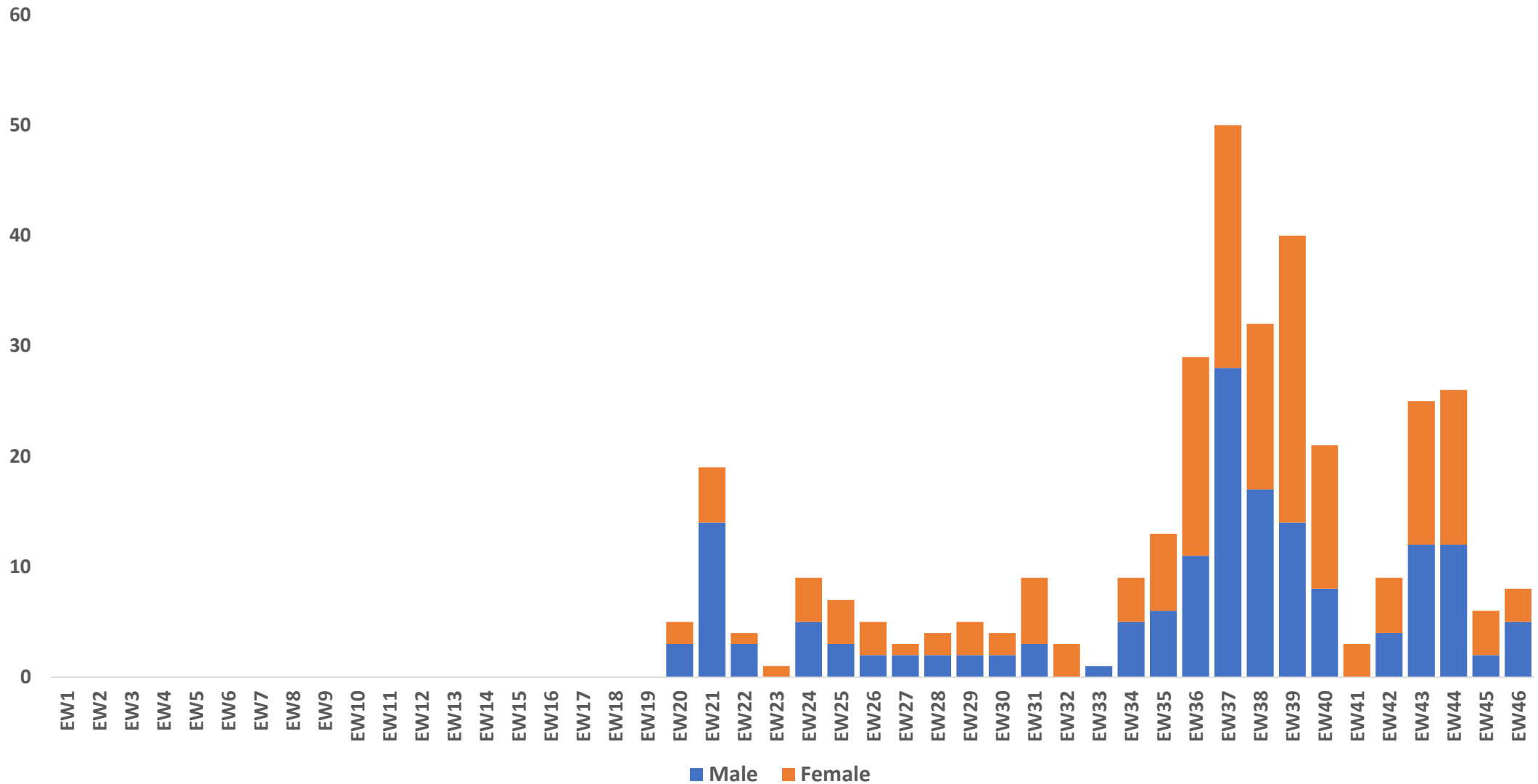
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# Highlights: COVID-19

- As of (week 46) (9-15 November) there are 350 confirmed cases of COVID-19 (SARS-CoV-2), 15902 samples were tested.
- This week (week 46), there have been 8 confirmed cases, 727 samples were tested, test positivity was 1.1%.
- As of this week (week 46)
  - all 34/34 camps have confirmed cases
  - a total of 10 deaths from COVID-19
  - the case fatality rate is 2.9%
  - the incidence is 40.7 per 100,000 people
  - the overall positivity of all samples tested was 2.2%

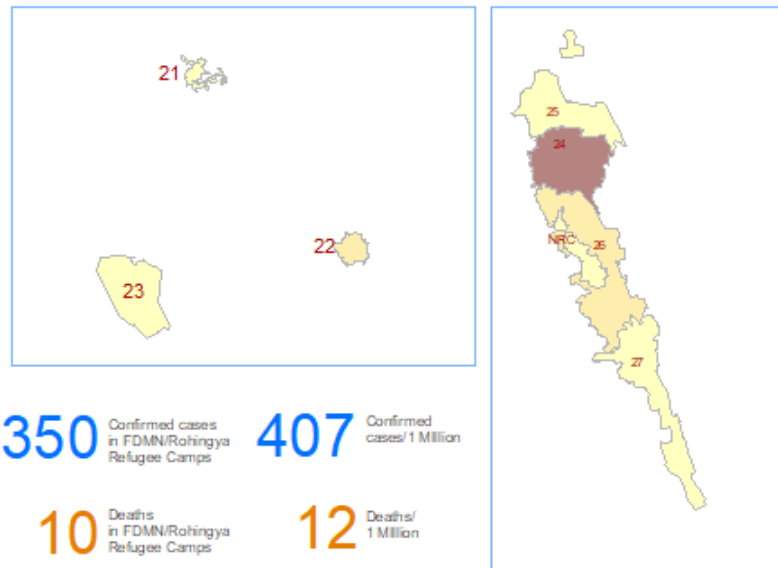
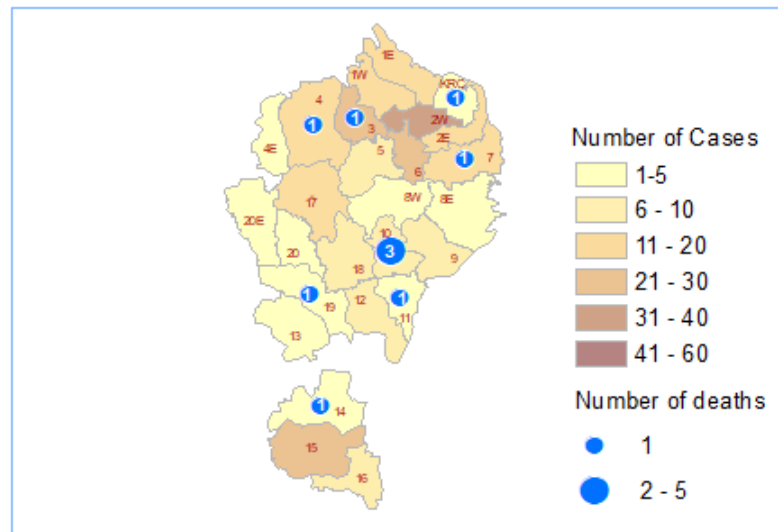
# Highlights: COVID-19

COVID-19 positive cases (n=350) by week of test

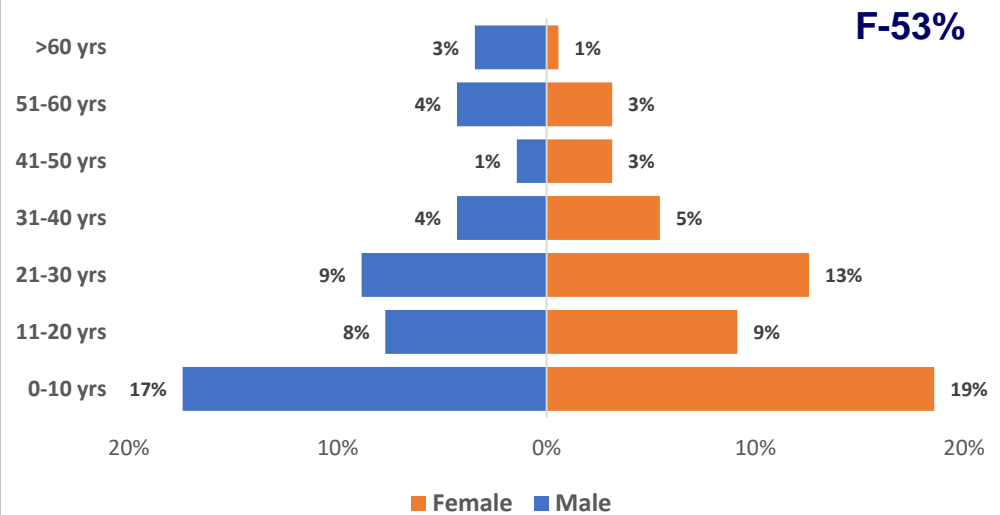


# Highlights: COVID-19

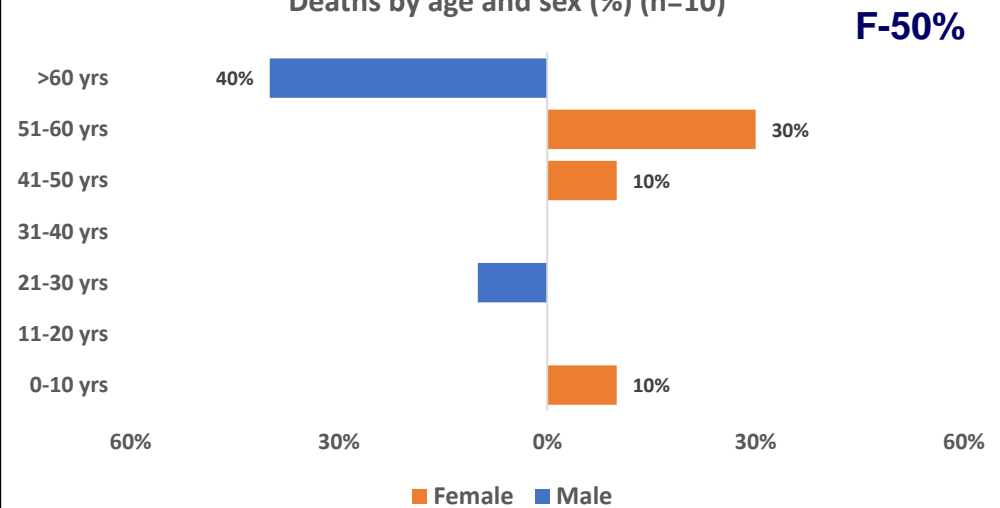
COVID-19 Cases in Rohingya Camps (As of 15 November 2020)



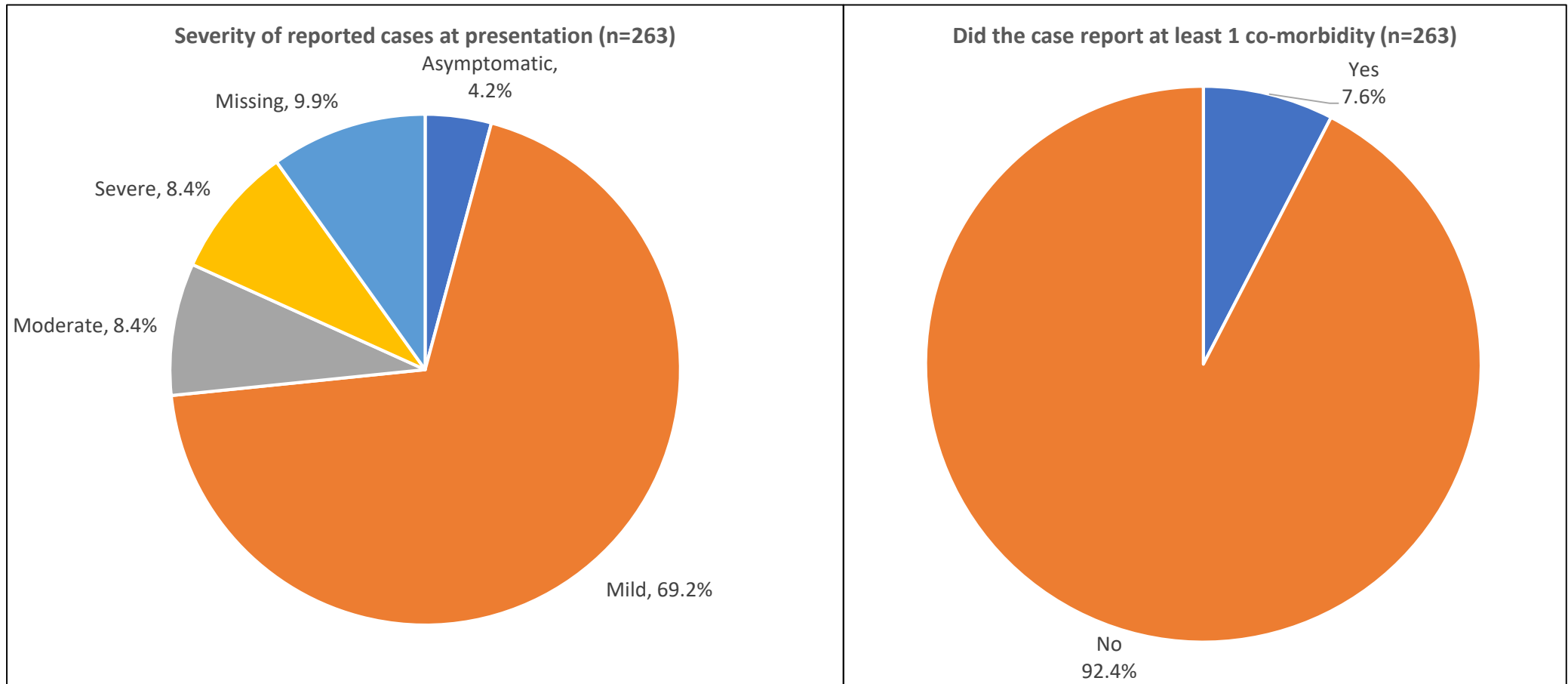
Age and sex distribution (%) (n=350)



Deaths by age and sex (%) (n=10)



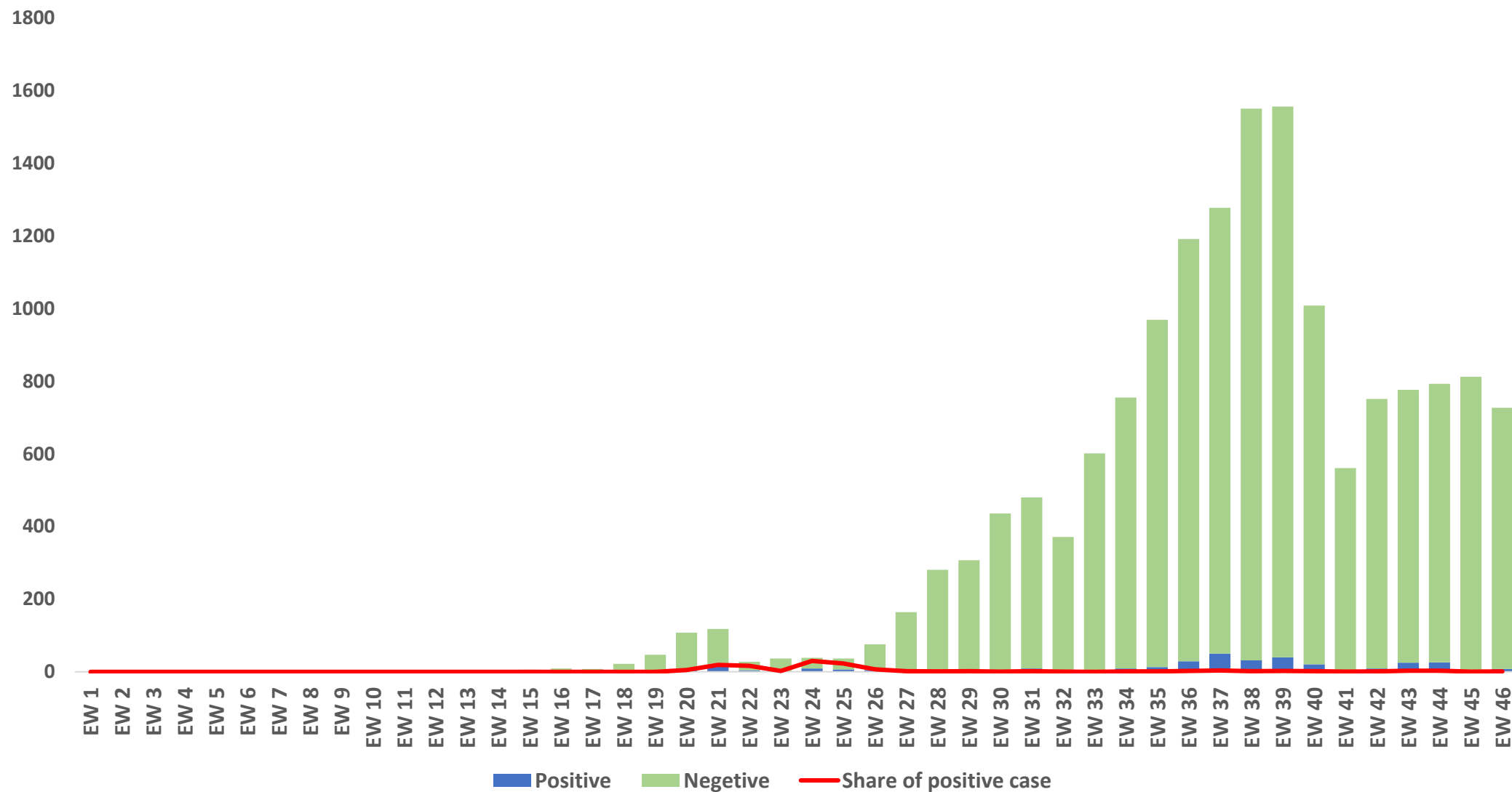
# Highlights: COVID-19



Source: Go.Data

# Highlights: COVID-19

Share of positive case (n=356)



# Highlights:

- Acute Respiratory Infection (14.9%), Diarrheal Diseases (7.2%) & Unexplained Fever (1.6%) are the diseases with highest proportional morbidity in week 46.
- Number of consultations are showed decreasing trend in last couple of week.
- Community-based mortality surveillance included SARI death in weekly reporting since week 28 and the reporting frequency changed since then from bi-weekly. Thirteen (14) SARI death has been reported so far.

# EWARS Reporting Updates

- Total 146/166 (88%) health facilities registered in EWARS
- Only 130/146 weekly reports received in week 46.
- Completeness and Timeliness for this week is 86%.
- Total 79 alerts were triggered in week 46.
- All alerts were reviewed and verified by WHO EWARS team which is less than as of previous week (56 in week 45).



# Diphtheria

Six suspected diphtheria case reported in go.data in week 46

A total of 9 176 case-patients were reported since 2017 to till date

- Confirmed = 329
- Probable = 2785
- Suspected = 6063

Total Case reported in 2020 = 213

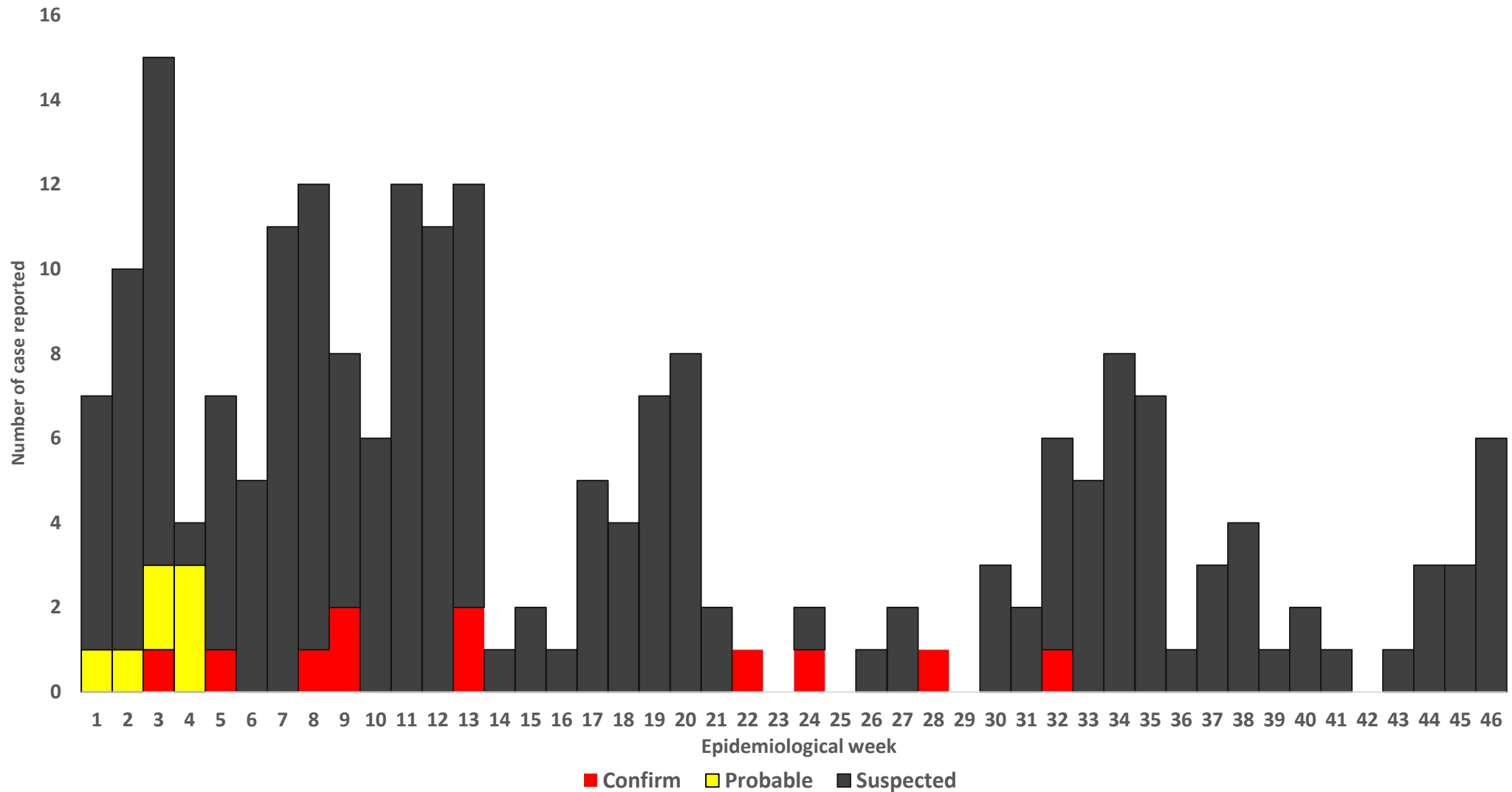
- Confirmed = 11
- Probable = 7
- Suspected = 195

Last confirmed case was reported in Week 33 (20 August 2020)

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

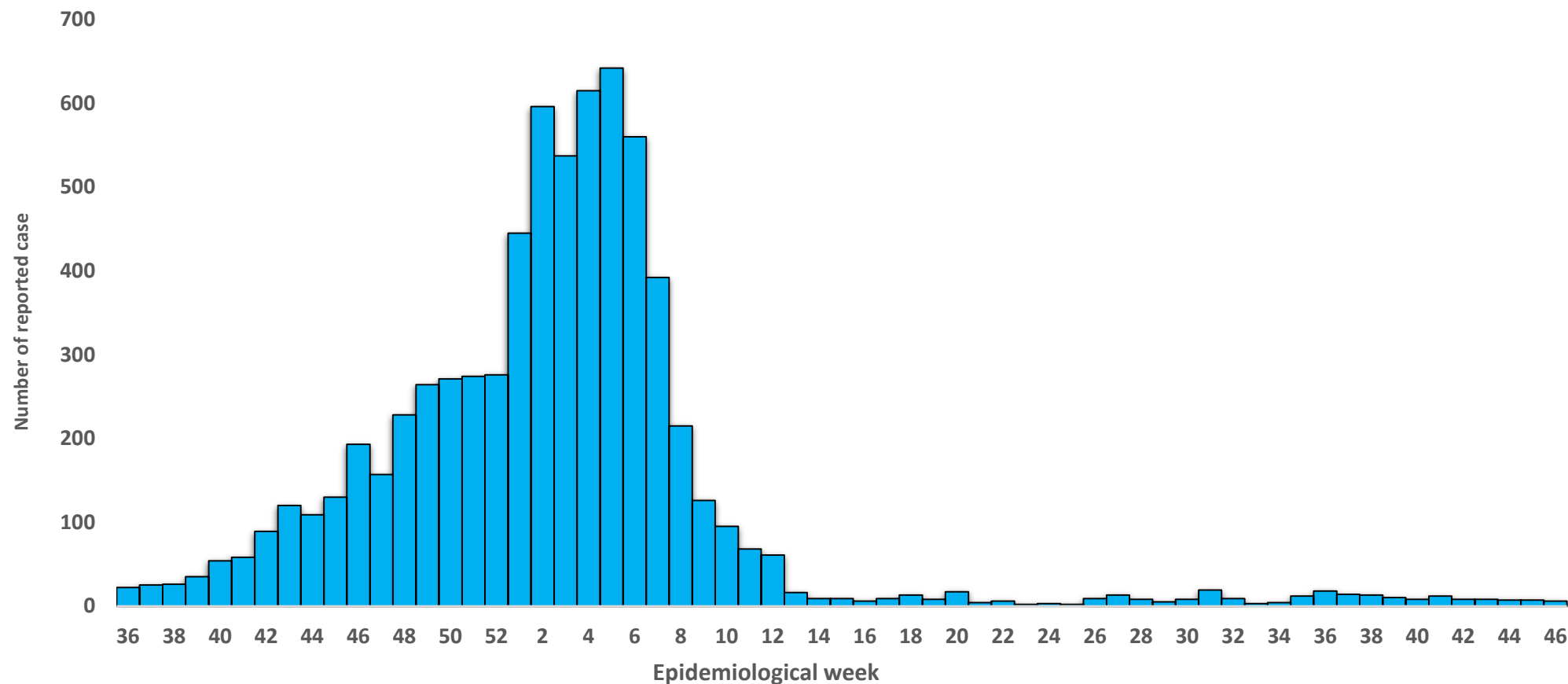
# Diphtheria

Total number of diphtheria case reported in EWARS from week 1-46 2020



# Measles

Total number of Measles case reported in EWARS from week 36, 2019 to week 46, 2020



Total 6 suspected measles cases were reported through aggregated weekly reporting in EWARS in week 45. Aggregated weekly report showed 4,592 and individual case report (CRF) found 2,540 (56%) in 2020.

# Diarrhoeal Disease

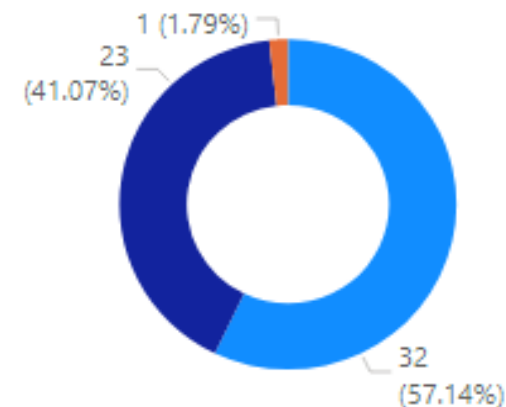
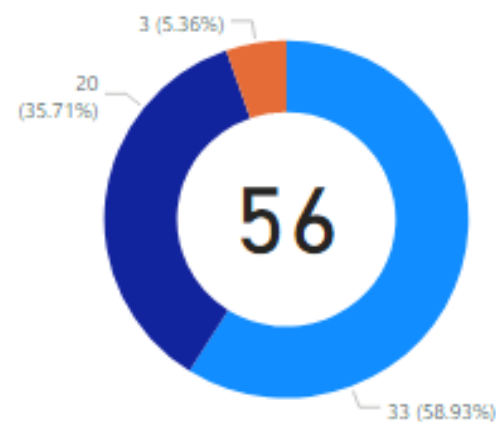
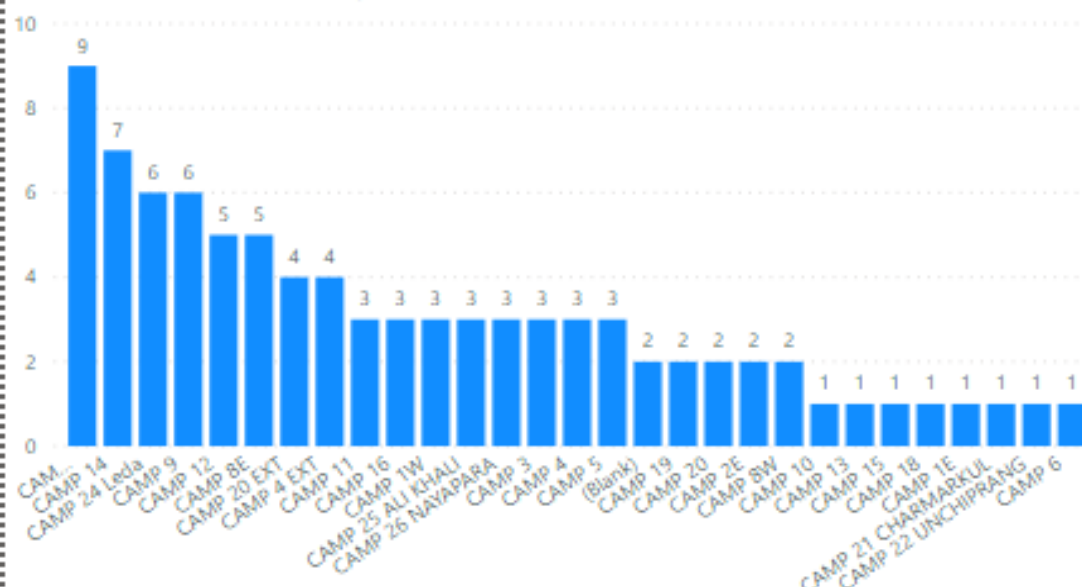
- A total of 5,666 cases of diarrhoeal diseases reported in EWARS in week 46.
- Among which 4,031 cases (5.1%) reported as acute watery diarrhoea (AWD), 1,336 (1.7%) and 299 (0.4%) cases as other diarrhea and bloody diarrhea respectively.
- Diarrhoeal diseases are the second highest contributor of proportional morbidity after acute respiratory infection (ARI).

# Community-based Mortality surveillance

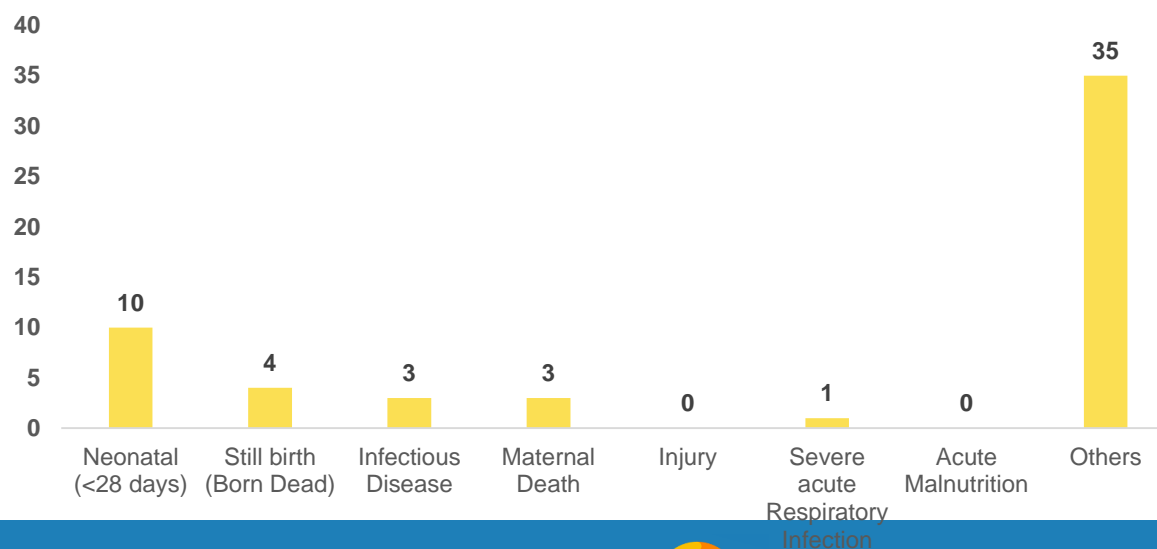
- In week 46 total of 56 deaths were recorded, 63% (n=35) were due to causes classified as “Others”, 18% (n=10) as Neonatal (<28 days old), 7% (n=4) as Still birth (Born Dead) 5% (n=3) as Infectious Disease, 5% (n=3) as Injury and 2% (n=1) as Severe acute respiratory infection (SARI)
- three mortality alert raised for women of reproductive age (12-49 years).
- 35,71% of deaths reported in the health facility 58.93% of deaths reported in homes and 5.36% deaths reported from Community/ Public place.
- Partners to report **all mortalities** into EWARS using the “Community-based mortality surveillance” form.

# Community-based Mortality Surveillance

Camp wise Deceased Case Distribution



Probable Cause of Death



# Bangladesh

Rohingya Emergency Response

Early Warning, Alert and  
Response System (EWARS)

Epidemiological Bulletin W46 2020



Ministry of Health and Family  
Welfare Bangladesh



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## Sources of data

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



## Highlights W46 2020

**Table 1 | Coverage**

#	%	
<b>854,704</b>	-	Estimated total Rohingya population <sup>1</sup>
<b>854,704</b>	<b>100%</b>	Total population under surveillance
<b>166</b>	-	Total number of health facilities
<b>146</b>	<b>88%</b>	Number of EWARS reporting sites

**Table 2 | Early warning performance indicators**

W46	Cumulative (2020)	
<b>130</b>	<b>6453</b>	Number of weekly reports received
<b>86%</b>	<b>89%</b>	Completeness
<b>86%</b>	<b>81%</b>	Timeliness

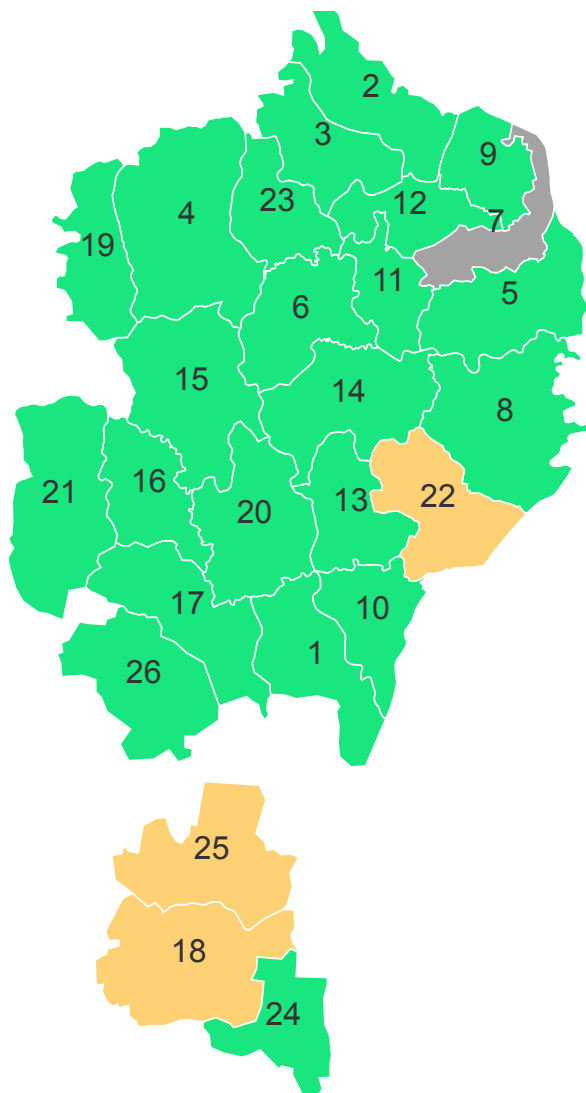
**Table 3 Alert performance indicators**

W46	Cumulative (2020)	
<b>79</b>	<b>2,886</b>	Total alerts raised
<b>100%</b>	<b>100%</b>	% verified
<b>0%</b>	<b>0%</b>	% auto-discarded
<b>2%</b>	<b>0%</b>	% undergoing risk assessment
<b>0%</b>	<b>0%</b>	% completed risk assessment

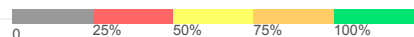
<sup>1</sup> Source: UNHCR. Bangladesh: Joint Government of Bangladesh- UNHCR Population Factsheet. 31 December 2019.

**Map 1a | Ukhia completeness by camp**

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

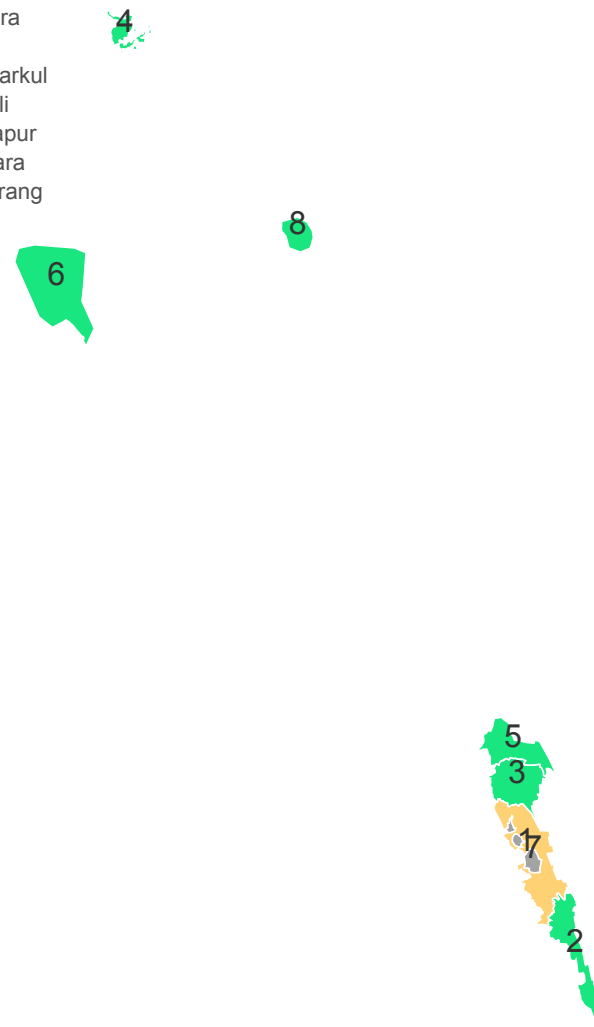


Completeness

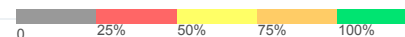


**Map 1b | Teknaf completeness by camp**

- 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

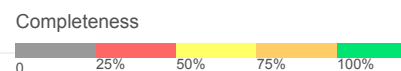
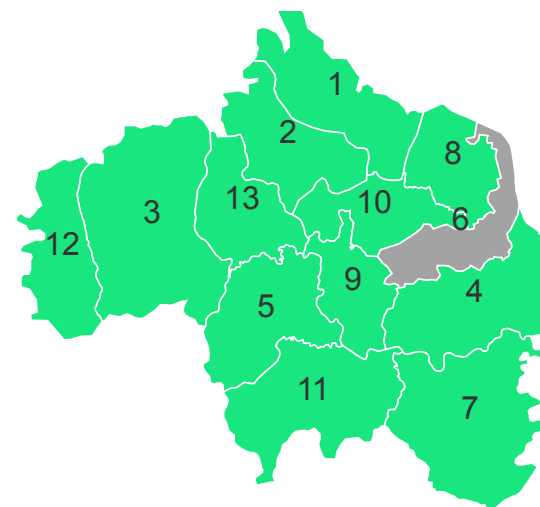


**Table 4 | Performance by camp (W46 2020)**

Northern group	Reporting		Performance	
	# health facilities	# reports received	Completeness	Timeliness
Camp 1E	4	4	100%	100%
Camp 1W	4	3	75%	75%
Camp 2E	1	0	0%	0%
Camp 2W	2	2	100%	100%
Camp 3	6	6	100%	100%
Camp 4	6	6	100%	100%
Camp 4 Ext	1	1	100%	100%
Camp 5	5	4	80%	80%
Camp 6	2	2	100%	100%
Camp 7	6	5	83%	83%
Camp 8E	7	7	100%	100%
Camp 8W	6	5	83%	83%
Kutupalong RC	1	2	100%	100%

**Map 2 | Completeness by camp**

- 1 Camp 1E
- 2 Camp 1W
- 3 Camp 4
- 4 Camp 7
- 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

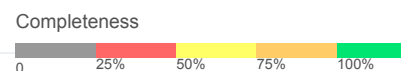
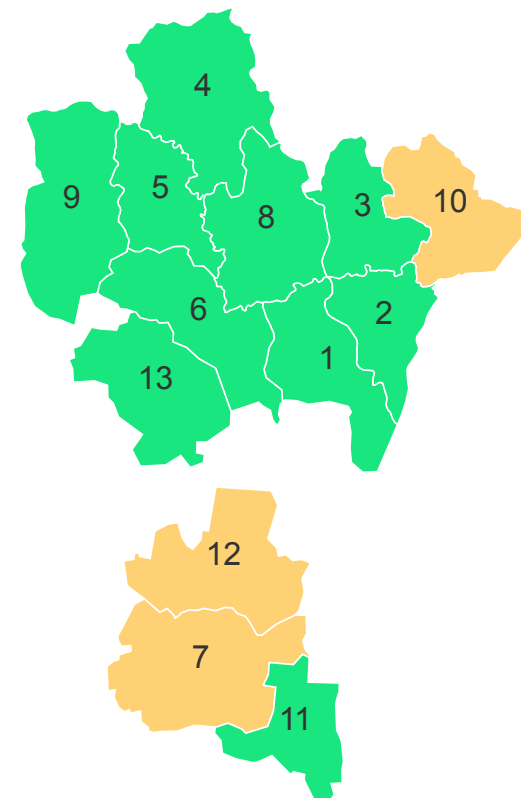


**Table 5** | Performance by camp (W46 2020)

Southern group	Reporting		Performance	
	# health facilities	# reports received	Completeness	Timeliness
Camp 10	4	4	100%	100%
Camp 11	9	9	100%	100%
Camp 12	6	6	100%	100%
Camp 13	9	8	89%	89%
Camp 14	6	3	50%	50%
Camp 15	10	6	67%	67%
Camp 16	5	5	100%	100%
Camp 17	5	4	80%	80%
Camp 18	5	4	80%	80%
Camp 19	5	5	100%	100%
Camp 20	3	3	100%	100%
Camp 20 Ext	2	2	100%	100%
Camp 9	7	4	67%	67%

**Map 3** | Completeness by camp

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

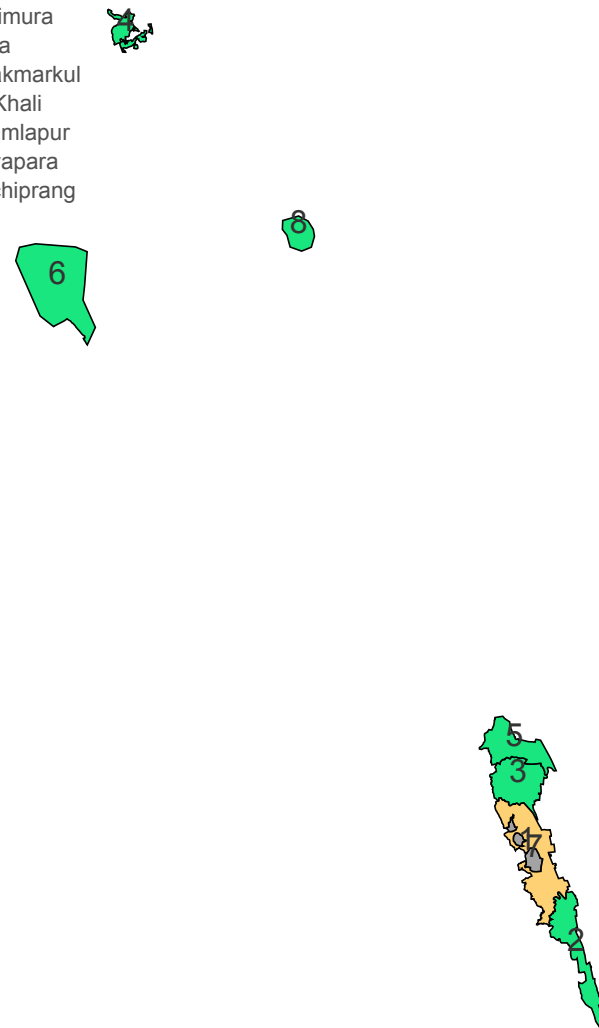


**Table 6** | Performance by camp (W46 2020)

Teknaf	Reporting		Performance	
	# health facilities	# reports received	Completeness	Timeliness
Camp 21 Chakmarkul	4	3	75%	75%
Camp 22 Unchiprang	5	3	75%	75%
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	3	2	67%	67%
Camp 27 Jadimura	1	1	100%	100%
Nayapara RC	0	2	0%	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 (W46 2020)

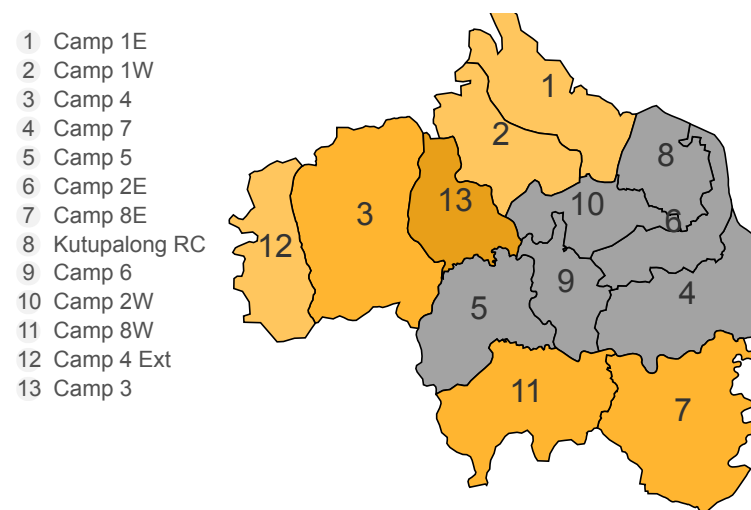
Partner	Performance		Reporting	
	# sites	# reports received	Completeness	Timeliness
BDRCS	9	9	100%	100%
BRAC	11	11	100%	100%
CARE	4	4	100%	100%
FHM	0	0		
FRNDS	12	10	83%	83%
GK	9	9	100%	100%
HMBDF	1	1	100%	100%
IOM	21	16	76%	76%
IRC	2	2	100%	100%
MSF	9	4	44%	44%
MoH	1	1	100%	100%
Hope	1	1	100%	100%
Medair	2	2	100%	100%

Partner	Performance		Reporting	
	# sites	# reports received	Completeness	Timeliness
FH/MTI	3	3	100%	100%
PHD	8	8	100%	100%
PWJ	1	1	100%	100%
RHU	1	1	100%	100%
RI	3	3	100%	100%
RTMI	9	9	100%	100%
SCI	9	8	89%	89%
TdH	1	1	100%	100%

### Table 8 | Performance by camp

Northern group	W46		Cumulative (2020)	
	# alerts	% verif.	# alerts	% verif.
Camp 1E	1	100%	67	100%
Camp 1W	1	100%	57	100%
Camp 2E	0	0%	60	100%
Camp 2W	0	0%	66	100%
Camp 3	7	100%	217	100%
Camp 4	4	100%	166	100%
Camp 4 Ext	1	100%	26	100%
Camp 5	0	0%	149	100%
Camp 6	0	0%	31	100%
Camp 7	0	0%	59	100%
Camp 8E	3	100%	39	100%
Camp 8W	3	100%	138	100%
Kutupalong RC	0	0%	23	100%

### Map 5 | Number of alerts by camp



# of alerts

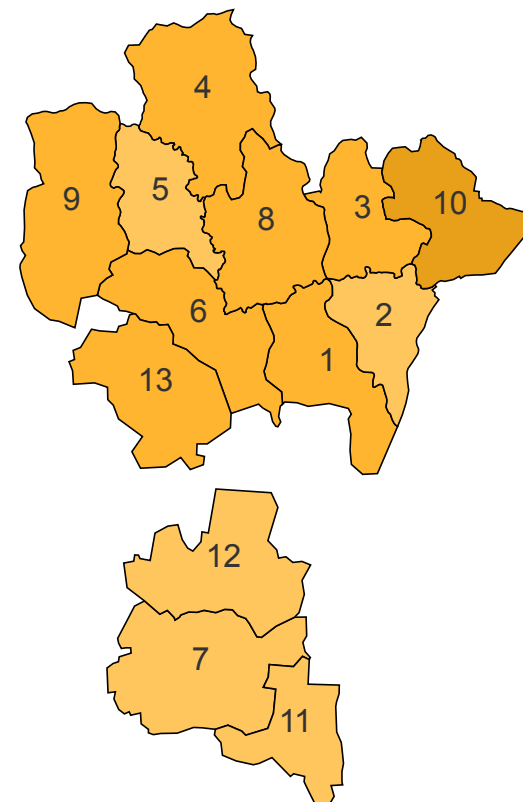


Table 9 | Performance by camp

Southern group	W46		Cumulative (2020)	
	# alerts	% verif.	# alerts	% verif.
Camp 10	5	100%	93	100%
Camp 11	1	100%	112	100%
Camp 12	3	100%	137	100%
Camp 13	4	100%	174	100%
Camp 14	2	100%	77	100%
Camp 15	2	100%	129	100%
Camp 16	1	100%	115	100%
Camp 17	5	100%	97	100%
Camp 18	3	100%	105	100%
Camp 19	3	100%	101	100%
Camp 20	1	100%	64	100%
Camp 20 Ext	4	100%	22	100%
Camp 9	6	100%	131	100%

Map 6 | Number of alerts by camp

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



# of alerts



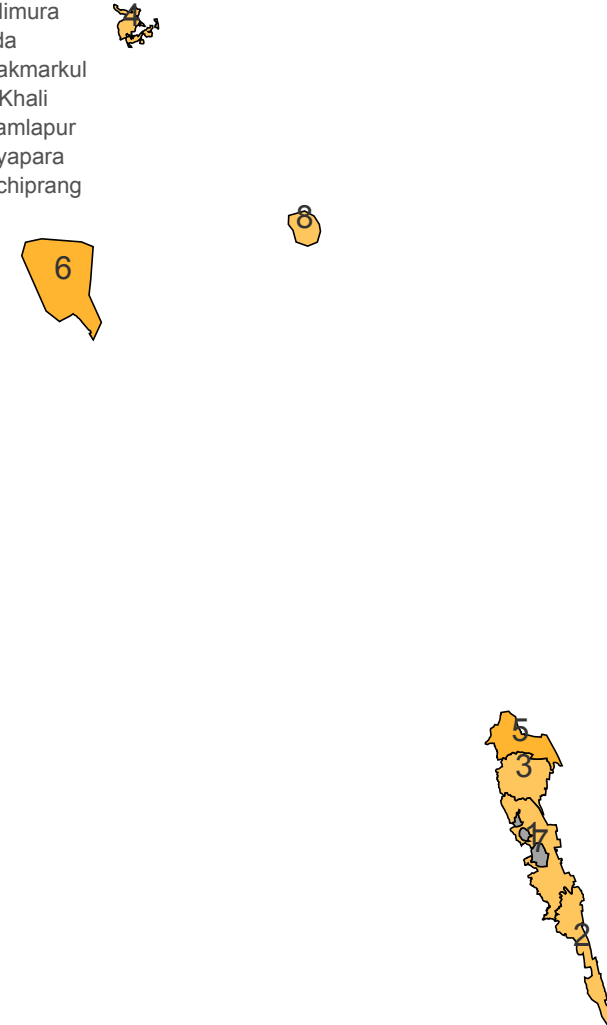


Table 10 | Performance by camp

Teknaf	W46		Cumulative (2020)	
	# alerts	% verif.	# alerts	% verif.
Camp 21 Chakmarkul	1	100%	61	98%
Camp 22 Unchiprang	2	100%	39	100%
Camp 23 Shamlapur	4	100%	59	100%
Camp 24 Leda	2	100%	26	100%
Camp 25 Ali Khali	4	100%	30	100%
Camp 26 Nayapara	1	100%	48	100%
Camp 27 Jadimura	2	100%	21	100%
Nayapara RC	0	0%	29	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



# of alerts



**Table 11** | Performance by type of alert

Event	W46		Cumulative (2020)	
	# alerts	% verif.	# alerts	% verif.
<b>Indicator-based surveillance</b>				
Malaria	0	0%	0	0%
Measles	5	100%	823	100%
Bloody Diarr.	0	0%	0	0%
AFP	1	100%	16	100%
Meningitis	1	100%	20	100%
Haem. fever (susp.)	0	0%	9	100%
NNT	0	0%	2	100%
Unexp. fever	2	100%	223	100%
AWD	14	100%	307	100%
ARI	10	100%	303	100%
AJS	1	100%	112	100%
Varicella (Susp.)	0	0%	12	100%
Suspected COVID-19	0	0%	0	0%
<b>Event-based surveillance</b>				
EBS total	3	100%	178	100%

**Table 12** | Risk assessment

W46	Cumulative (2020)	
0	4	Low risk
0	2	Moderate risk
0	0	High risk
0	0	Very high risk

## For more help and support, please contact:

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Email: khan@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>



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World Health  
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Global

EWARS

# Bangladesh

## Rohingya Emergency Response

## Early Warning, Alert and Response System (EWARS)

Annex W46 2020



Ministry of Health and Family  
Welfare Bangladesh



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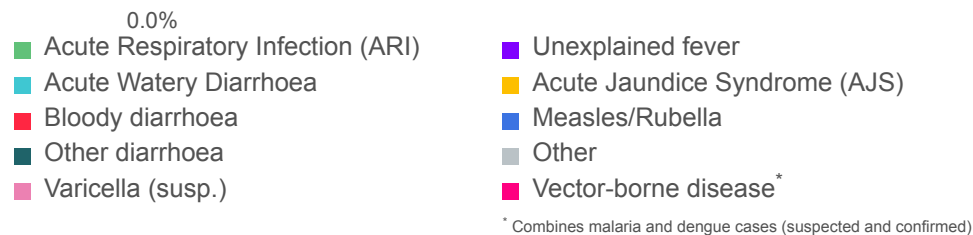
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# Proportional morbidity

**Figure 1 | Proportional morbidity (W46 2020)**



Disease	W46		2020	
	# cases	% morbidity	# cases	% morbidity
AWD	4,031	5.1%	122,169	4.4%
Bloody diarr.	299	0.4%	14,312	0.5%
Other diarr.	1,336	1.7%	45,086	1.6%
Susp. Varicella	14	0.0%	1,841	0.1%
ARI	11,887	14.9%	534,975	19.4%
Measles/Rub.	6	0.0%	4,592	0.2%
AFP	1	0.0%	14	0.0%
Susp. menin.	3	0.0%	69	0.0%
AJS	7	0.0%	890	0.0%
Susp. HF	0	0.0%	21	0.0%
Neo. tetanus	0	0.0%	1	0.0%
Adult tetanus	0	0.0%	10	0.0%
Malaria (conf.)	0	0.0%	8	0.0%
Malaria (susp.)	2	0.0%	3,504	0.1%
Dengue (conf.)	0	0.0%	3	0.0%
Dengue (susp.)	0	0.0%	15	0.0%
Unexpl. fever	1,270	1.6%	53,010	1.9%
Sev. Malnut.	38	0.0%	1,157	0.0%
Inj./Wounds	1,831	2.3%	70,460	2.5%
Other	58,854	73.9%	1,911,175	69.1%
<b>Total</b>	<b>78,326</b>	<b>100%</b>	<b>2,764,222</b>	<b>100%</b>

## Trend in consultations and key diseases

**Figure 2** | Trend in proportional morbidity for key diseases (W46)

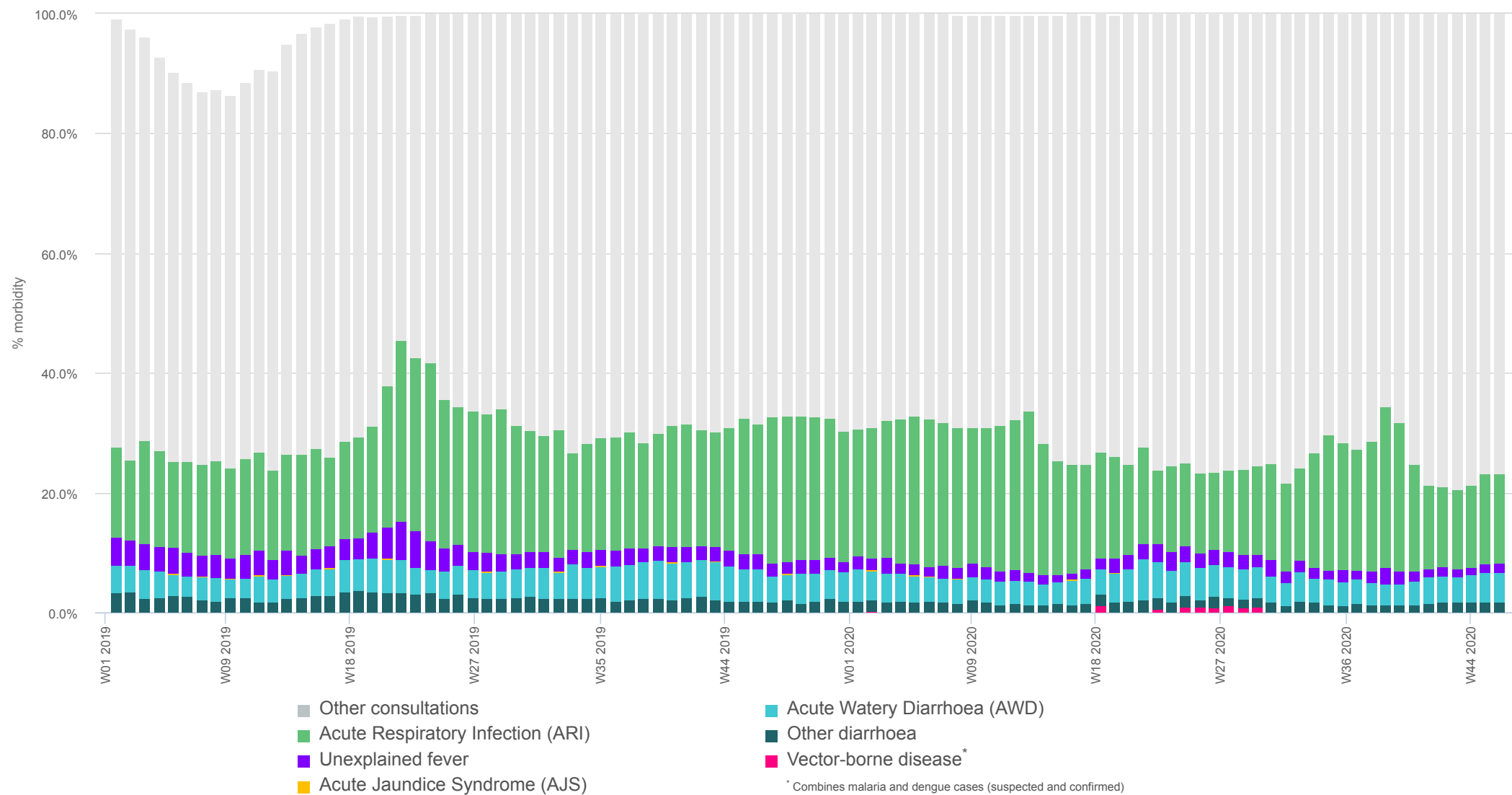
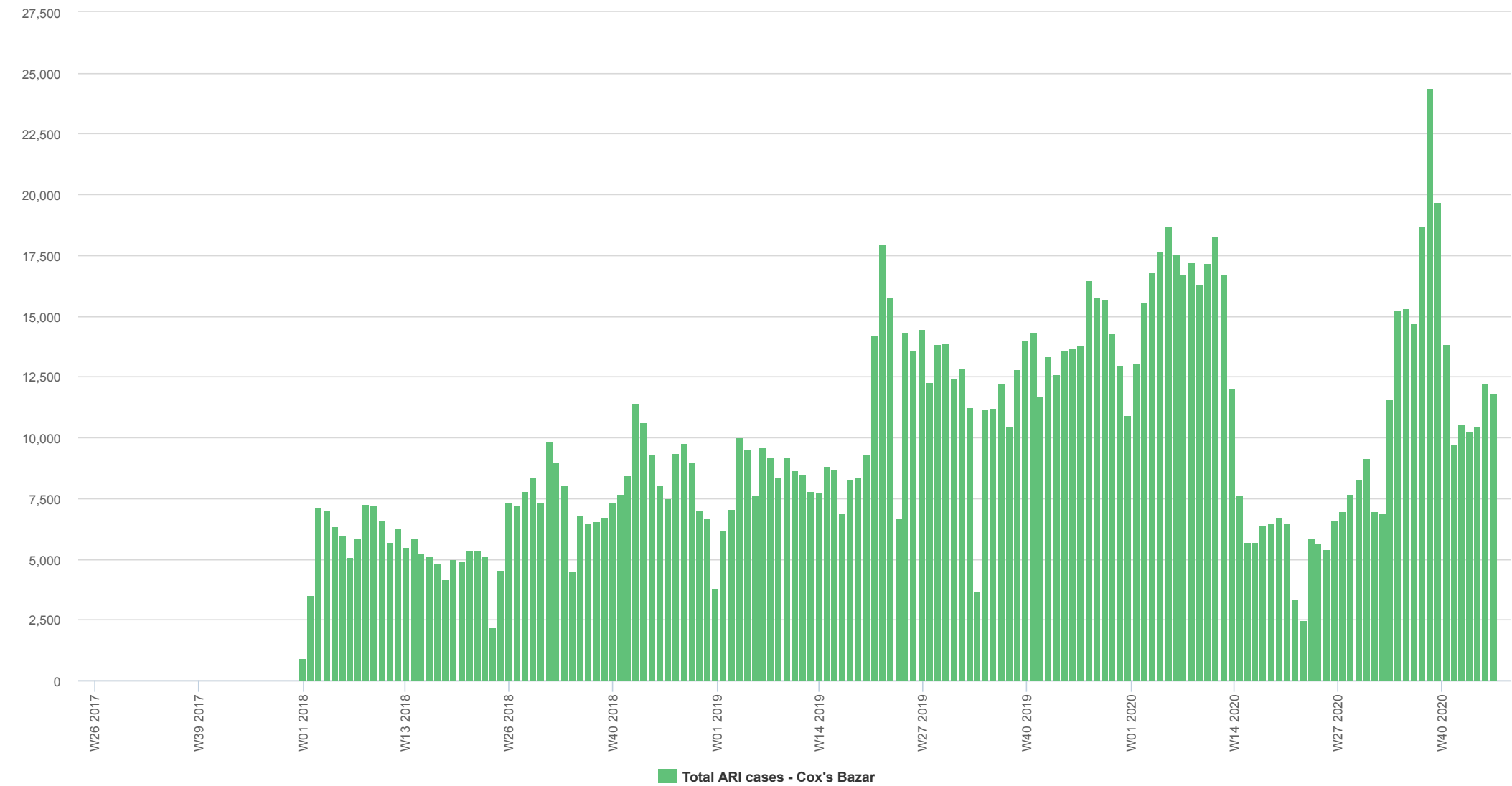
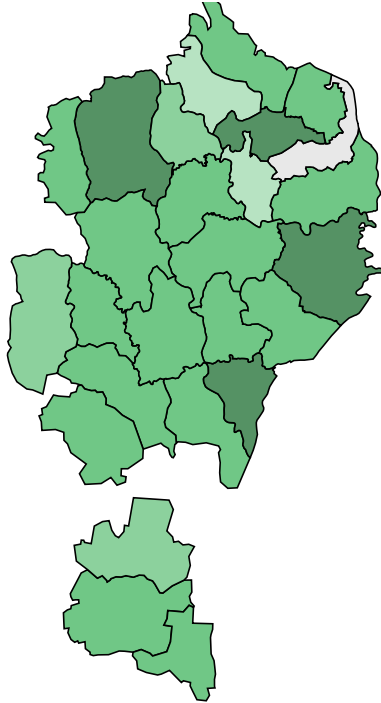


Figure 3 | Trend in number of cases over time (W38 2017 - W46 2020)

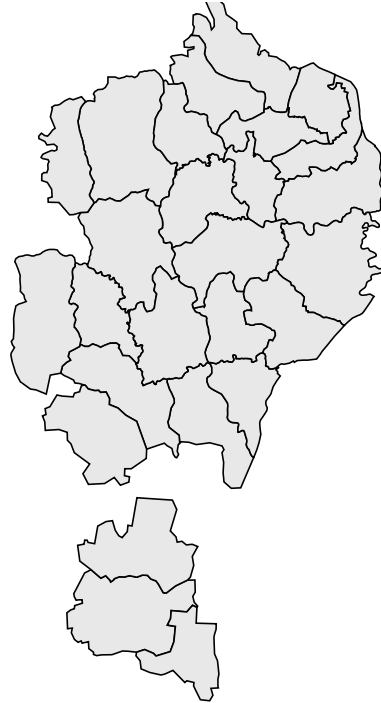


**Map 1** | Map of cases by camp (W46 2020)

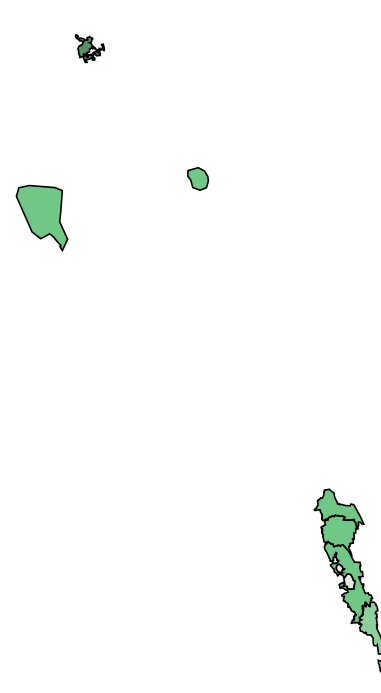
**a. Ukhia** | Number of cases



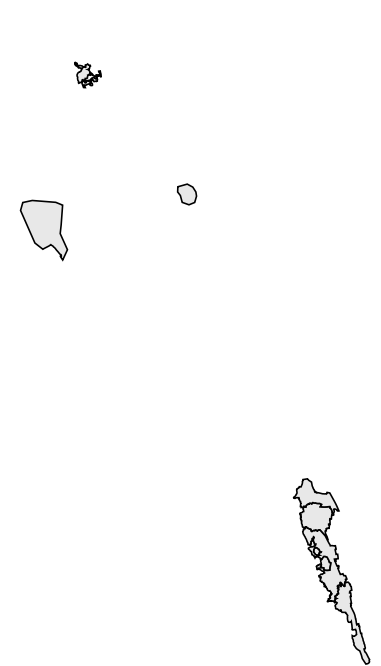
**b. Ukhia** | Number of alerts



**c. Teknaf** | Number of cases



**d. Teknaf** | Number of alerts



## Map legend

Number of cases



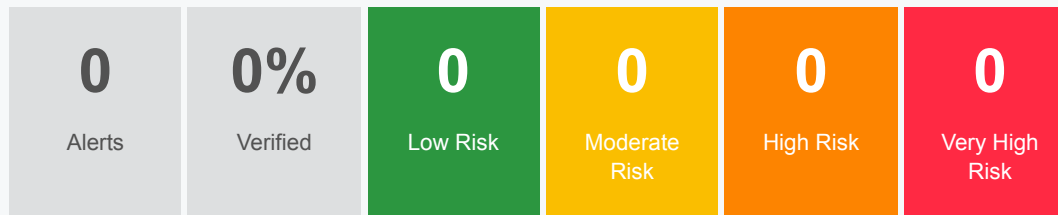
Number of alerts



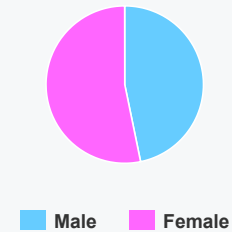
## Alert threshold

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

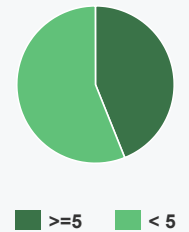
## Alert management (W46 2020)



## Figure | % sex

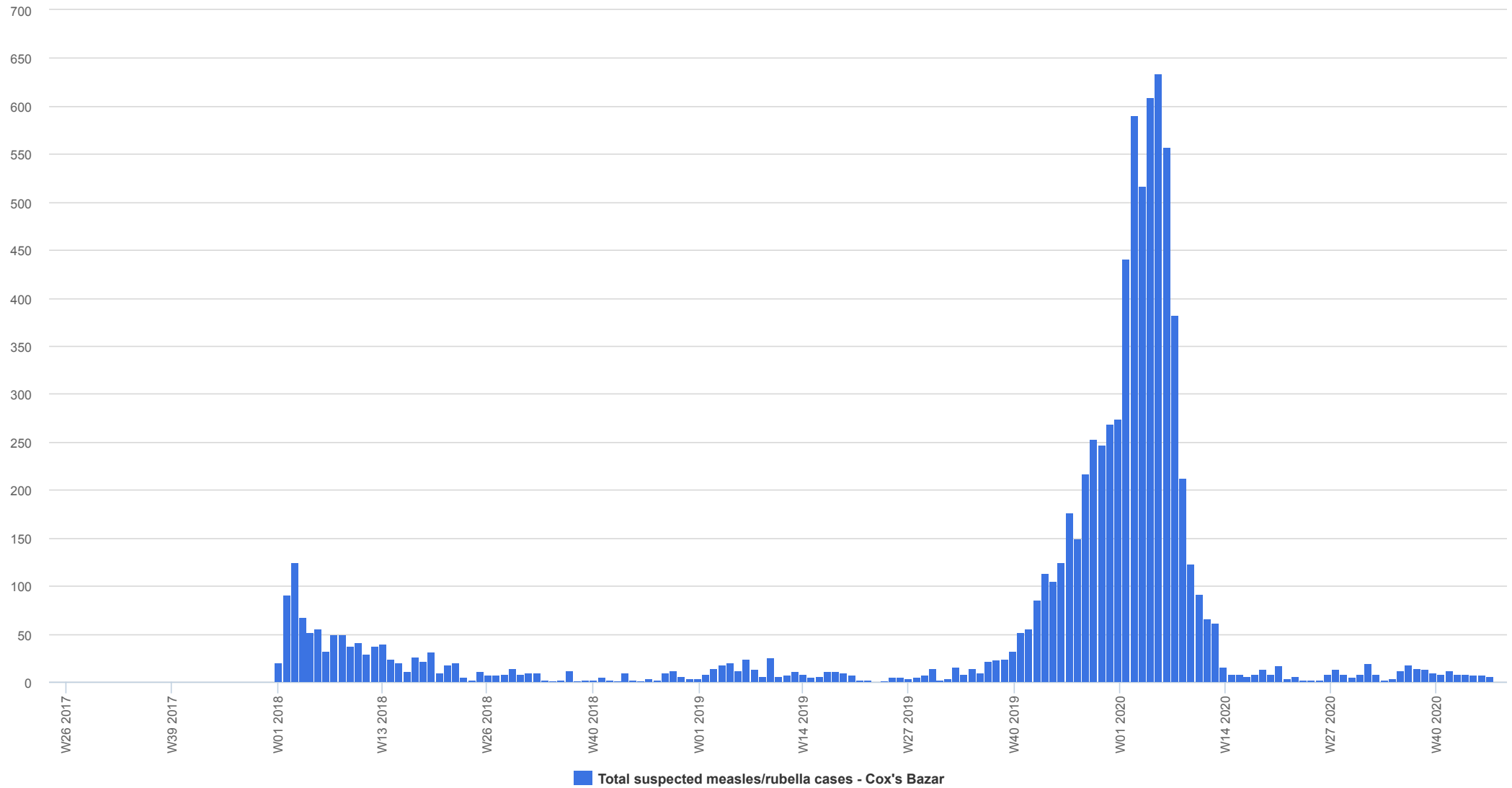


## Figure | % age



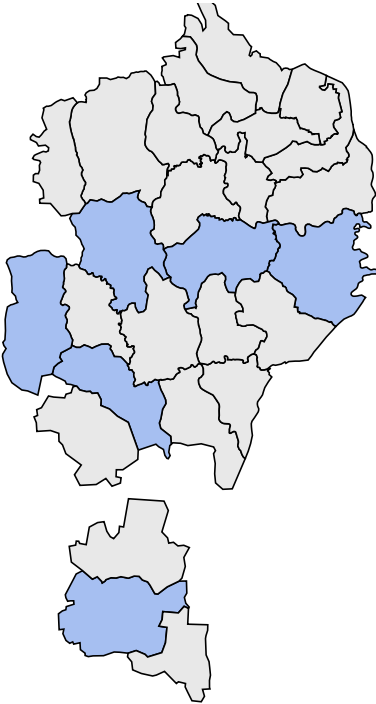


**Figure 4** | Trend in number of suspected cases over time (W38 2017 - W46 2020)

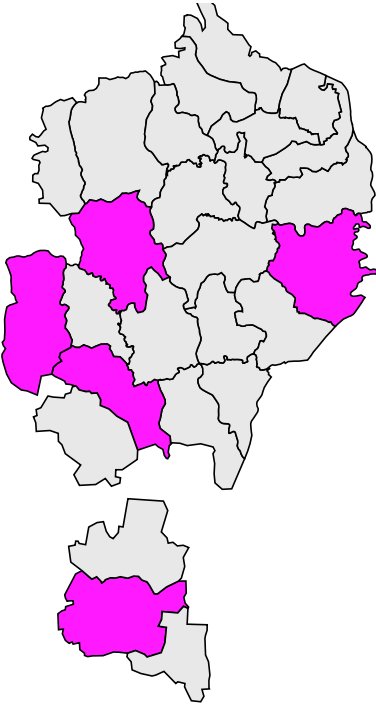


Map 2 | Map of cases by camp (W46 2020)

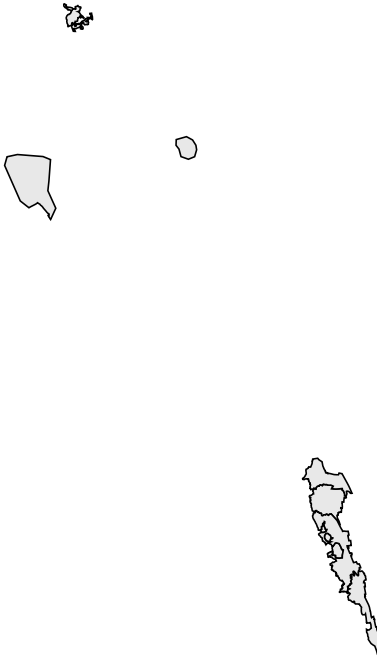
a. Ukhia | Number of cases



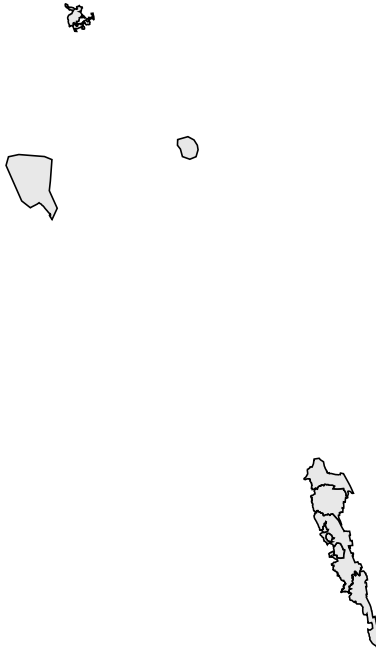
b. Ukhia | Number of alerts



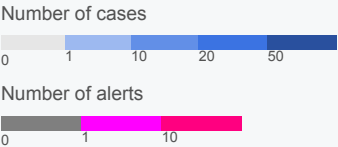
c. Teknaf | Number of cases



d. Teknaf | Number of alerts



Map legend



Alert threshold  
1 case. Source: IEDCR

Alert management (W46 2020)

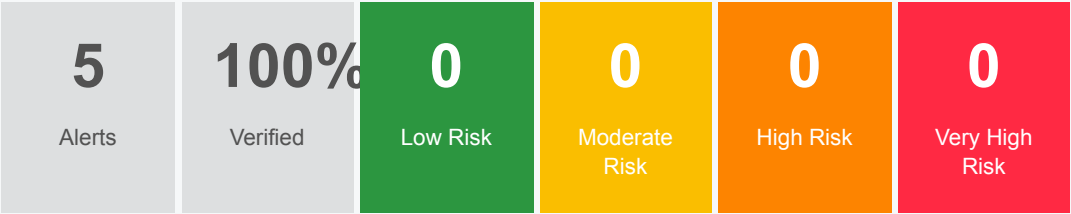


Figure | % sex

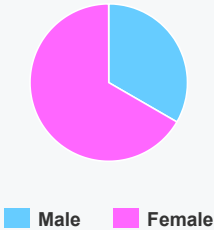
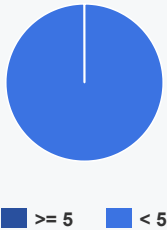
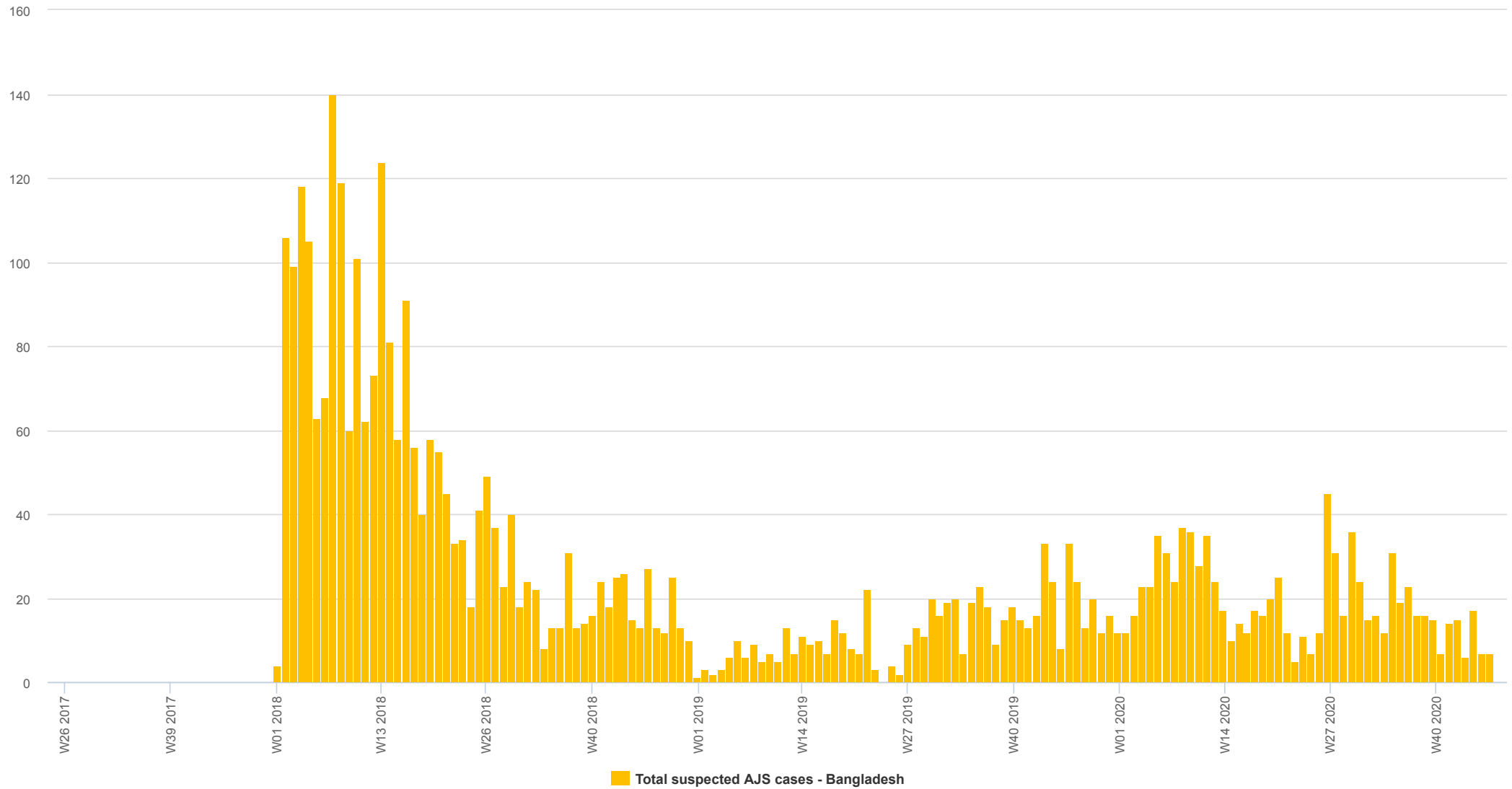


Figure | % age

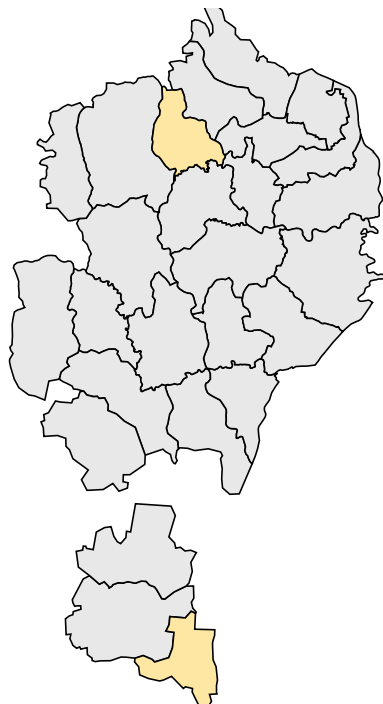


**Figure 5** | Trend in number of cases over time (W38 2017 - W46 2020)

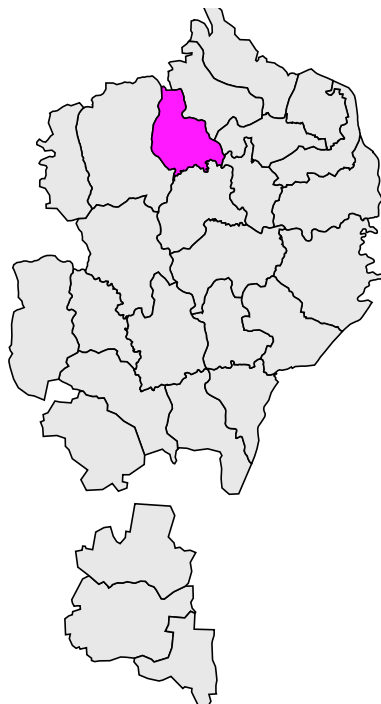


**Map 3 | Map of cases by camp (W37 2017 - W46 2020)**

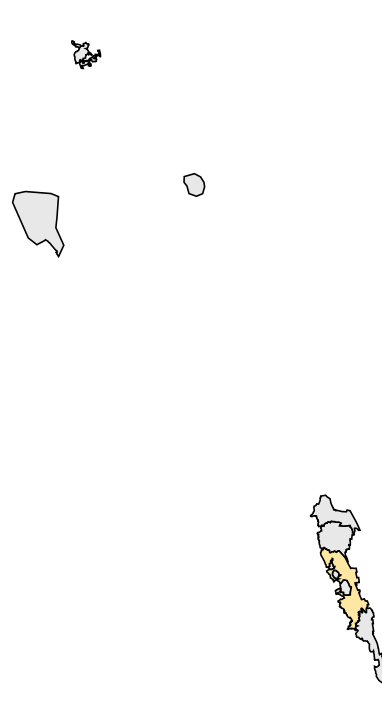
**a. Ukhia | Number of cases**



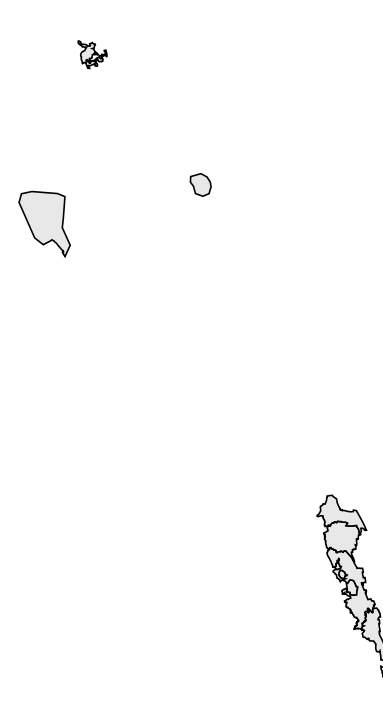
**b. Ukhia | Number of alerts**



**c. Teknaf | Number of cases**

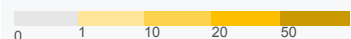


**d. Teknaf | Number of alerts**



## Map legend

Number of cases



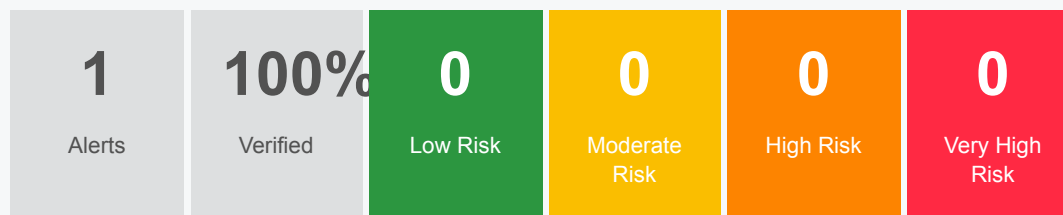
Number of alerts



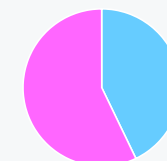
## Alert threshold

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

## Alert management (W46 2020)

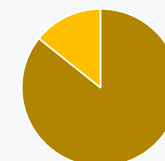


## Figure | % sex



Male Female

## Figure | % age



>= 5 < 5

**Figure 6** | Trend in number of cases over time (W38 2017 - W46 2020)

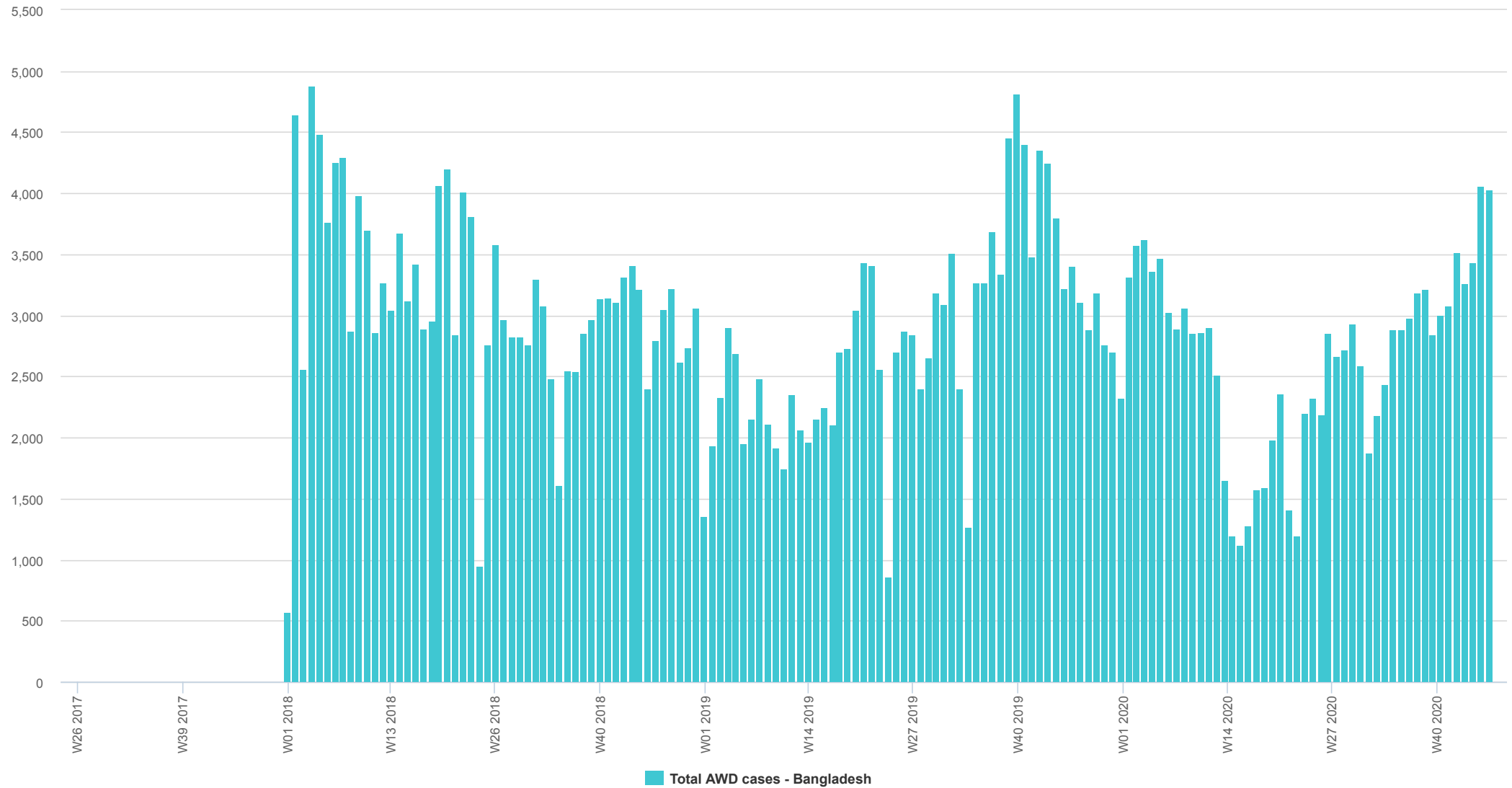
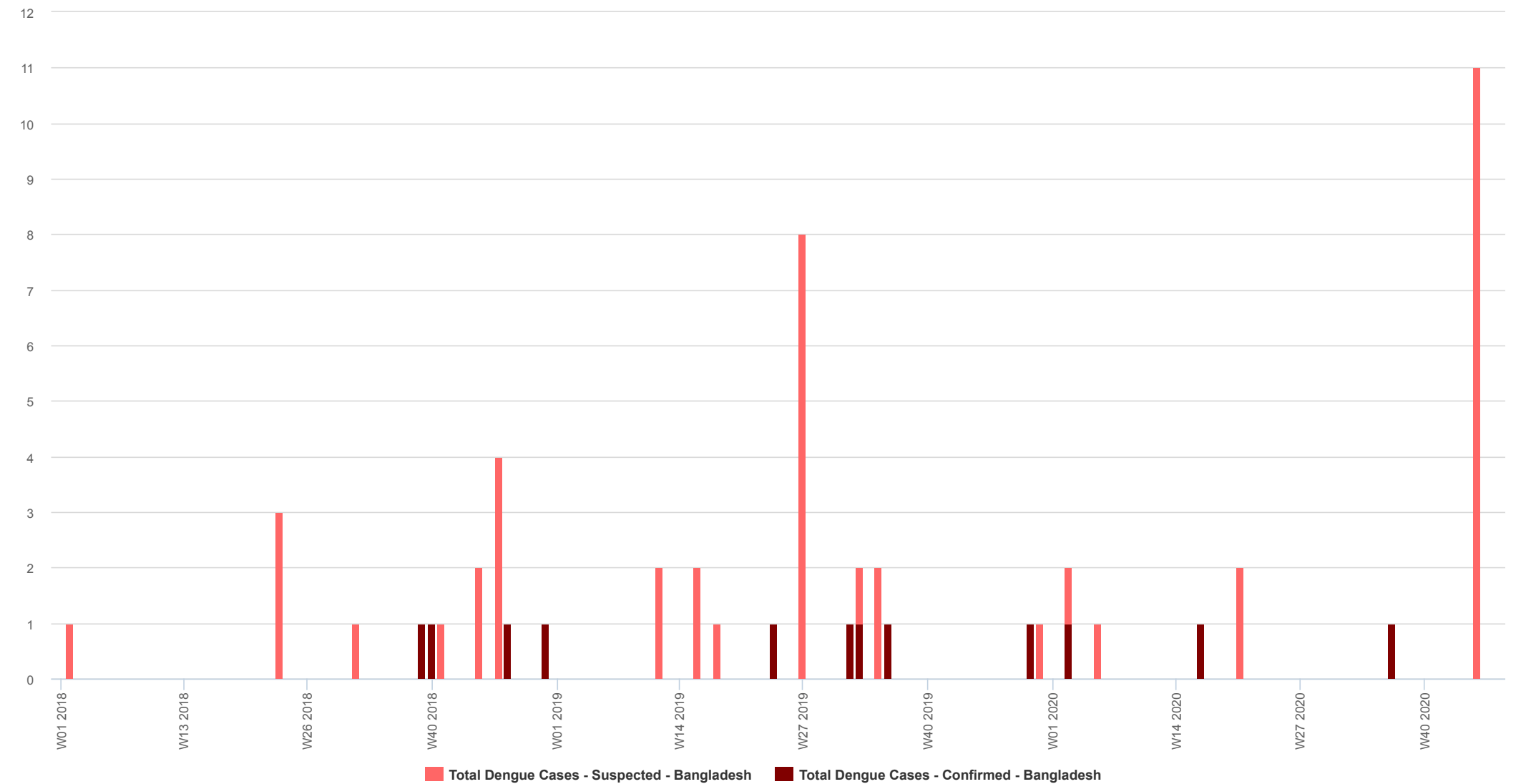


Figure 7 | Trend in number of cases over time (W38 2017 - W46 2020)



Map 4 | Map of cases by camp (W37 2017 - W46 2020)

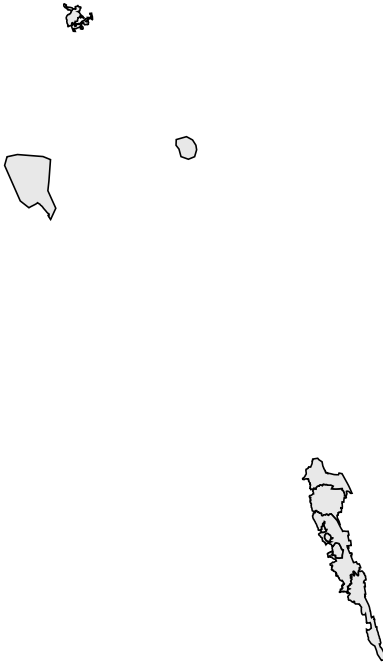
a. Ukhia | Number of cases



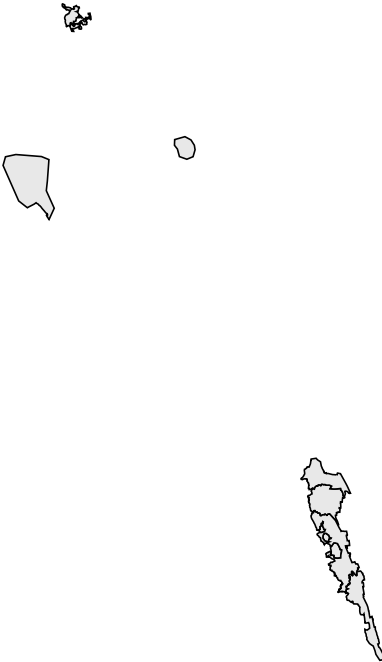
b. Ukhia | Number of alerts



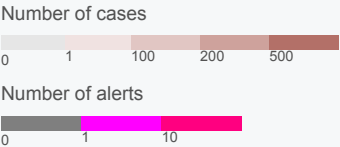
c. Teknaf | Number of cases



d. Teknaf | Number of alerts



Map legend



Alert threshold

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

Alert management (W46 2020)

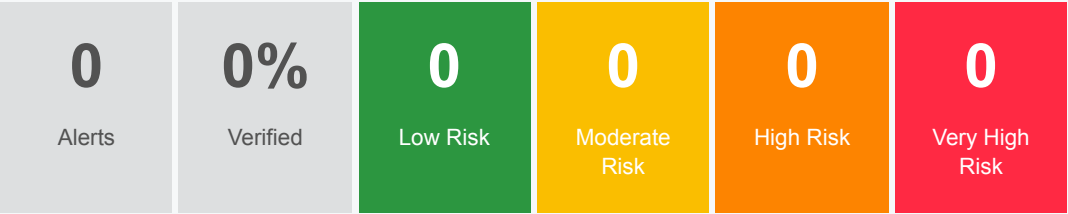


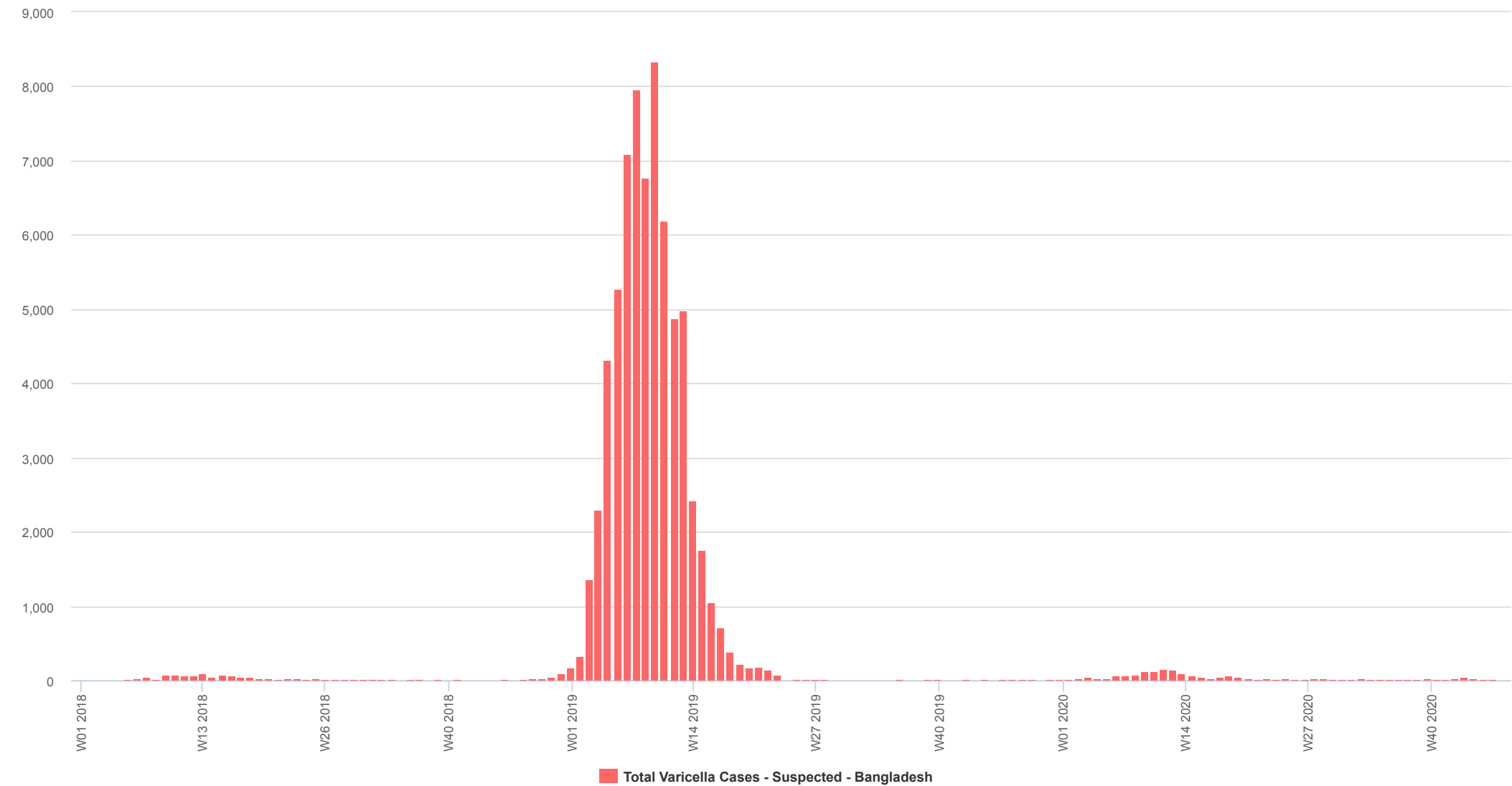
Figure | % sex



Figure | % age



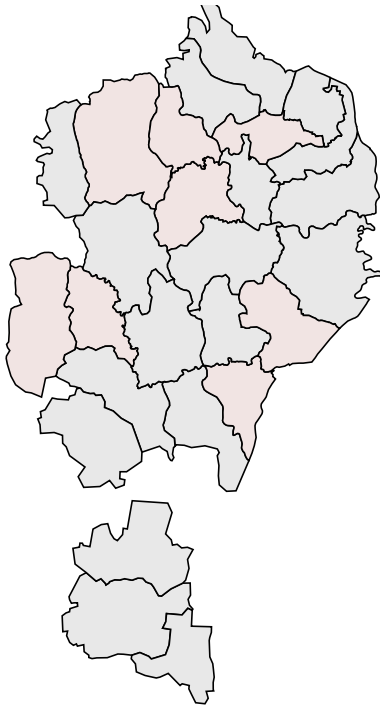
Figure 7 | Trend in number of cases over time (W38 2017 - W46 2020)



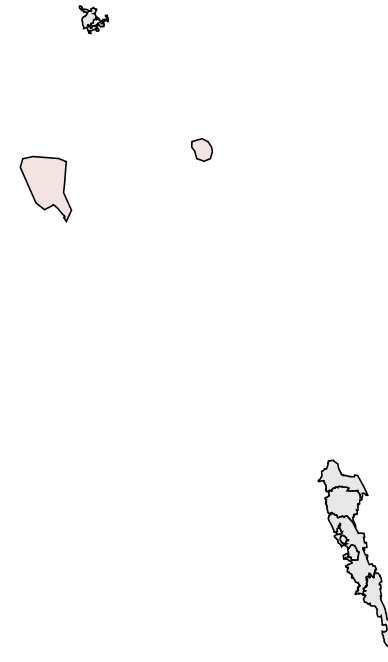


**Map 4** | Map of cases by camp (W37 2017 - W46 2020)

**a. Ukhia** | Number of cases

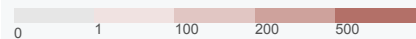


**c. Teknaf** | Number of cases

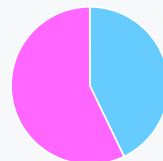


## Map legend

Number of cases

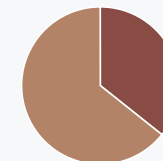


**Figure** | % sex



Male Female

**Figure** | % age



>= 5 < 5

## For more help and support, please contact:

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## 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>



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