



# Epidemiological Highlights

Week 49 (30 Nov- 6 Dec 2020)



World Health  
Organization

# Highlights: COVID-19

As of week 49 (30 Nov – 06 Dec) there are 363 confirmed cases of COVID-19 (SARS-CoV-2), 19 651 samples were tested.

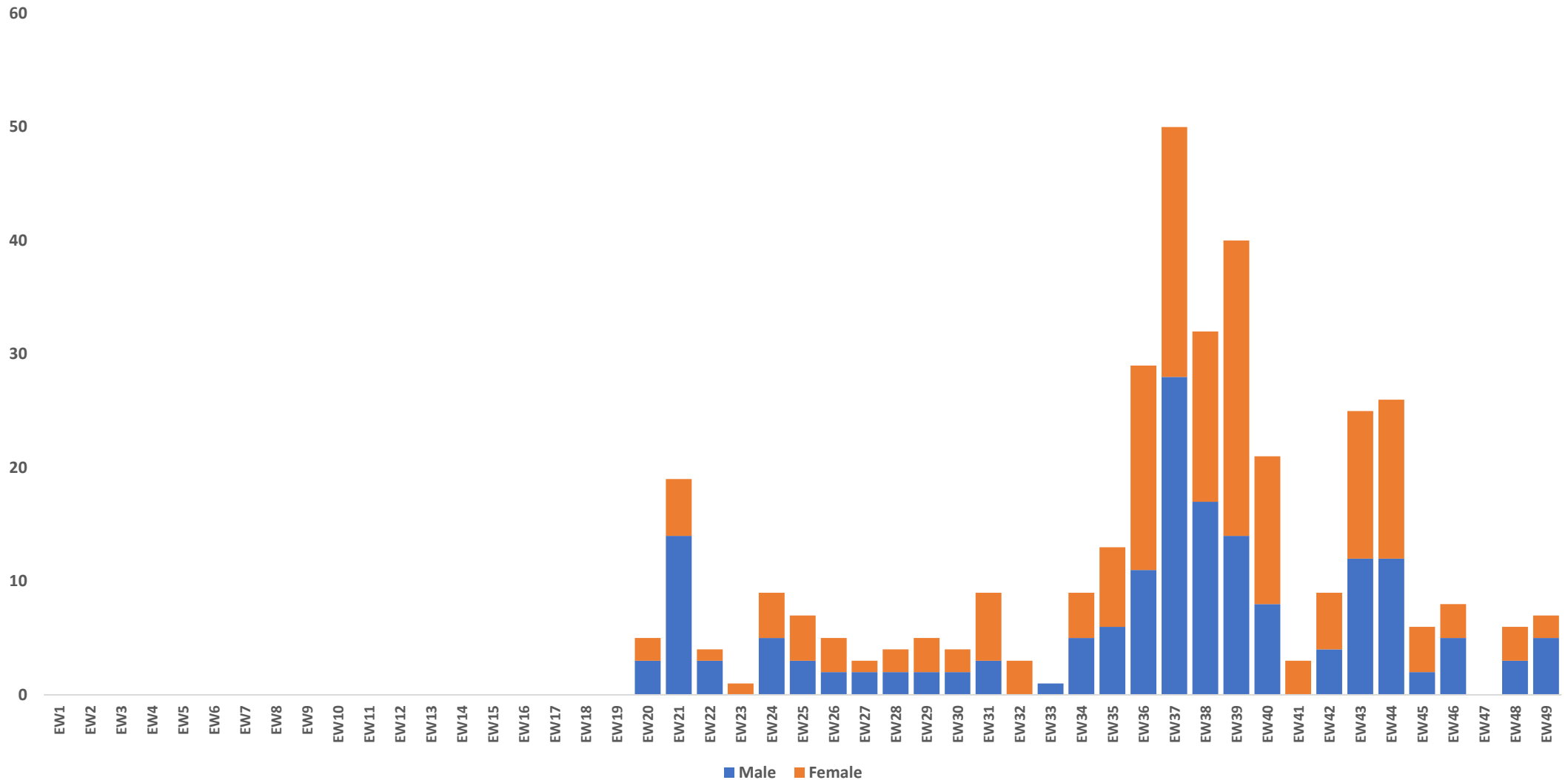
This week (week 49), 7 new confirmed cases detected, 1 230 samples were tested, test positivity was 0.6%.

## As of this week (week 49)

- all 34/34 camps have confirmed cases
- a total of 10 deaths from COVID-19
- the case fatality rate is 2.8%
- the incidence is 42.2 per 100,000 people
- the overall positivity of all samples tested was 1.8%

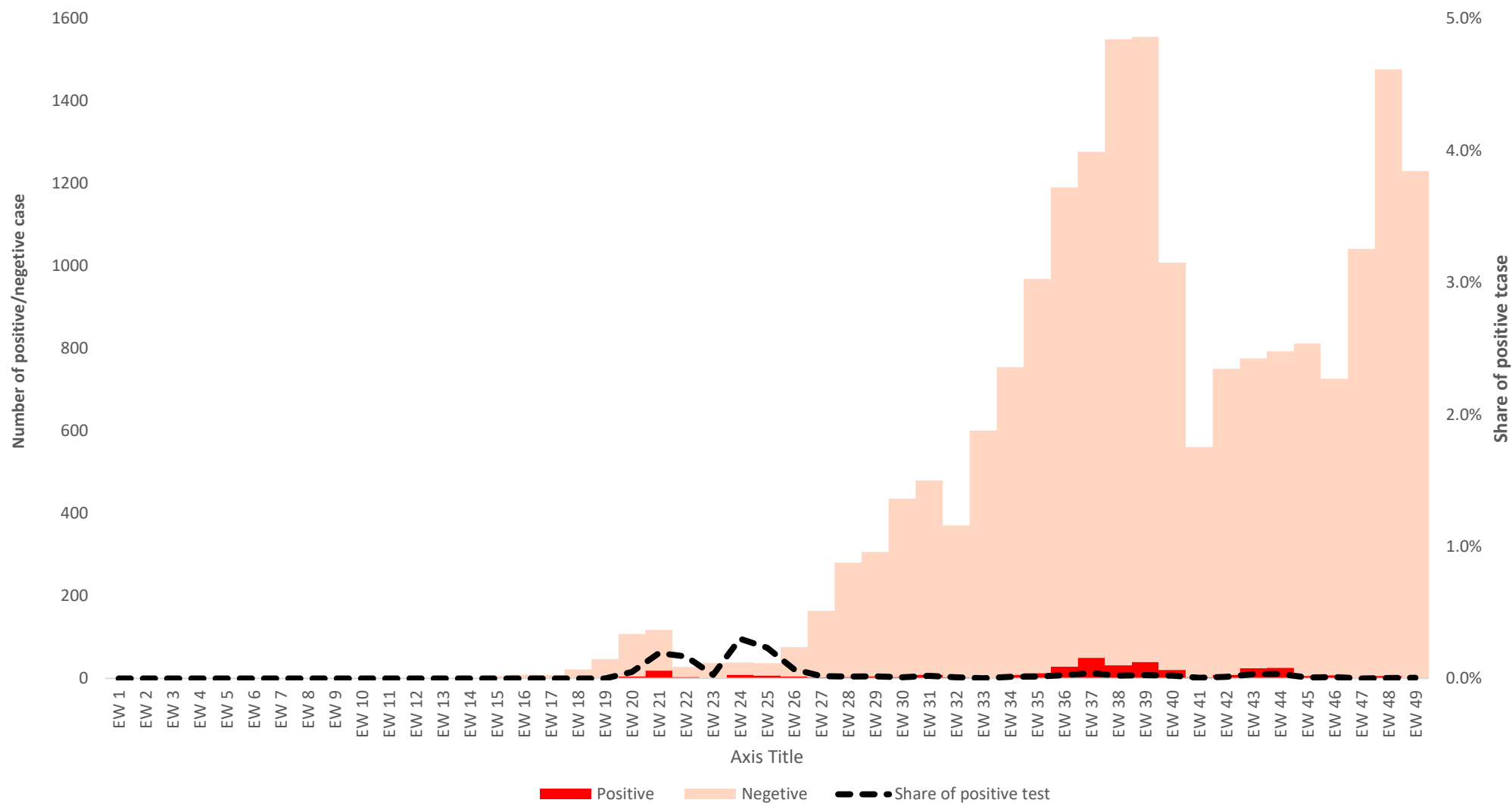
# Highlights: COVID-19

COVID-19 positive cases (n=363) by week of test



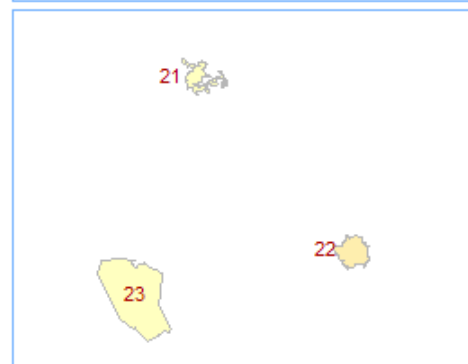
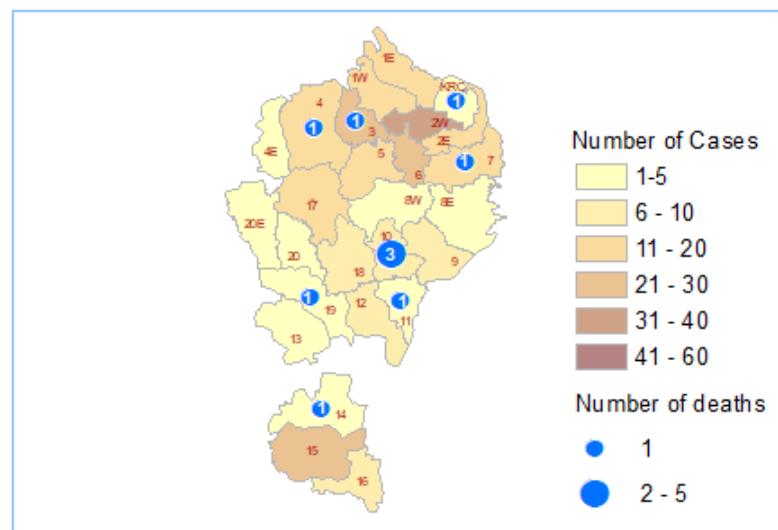
# Highlights: COVID-19

Trend of test (19,651), positive cases (n=363) and share of positive test



# Highlights: COVID-19

## COVID-19 Cases in Rohingya Camps (As of 06 December 2020)

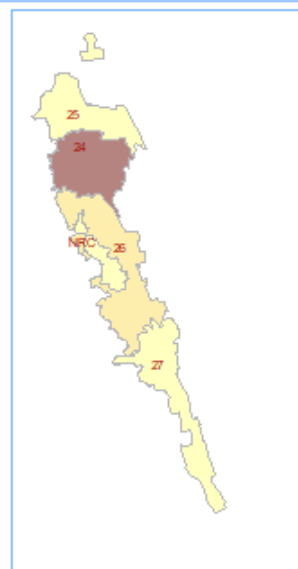


**363** Confirmed cases in FDMN/Rohingya Refugee Camps

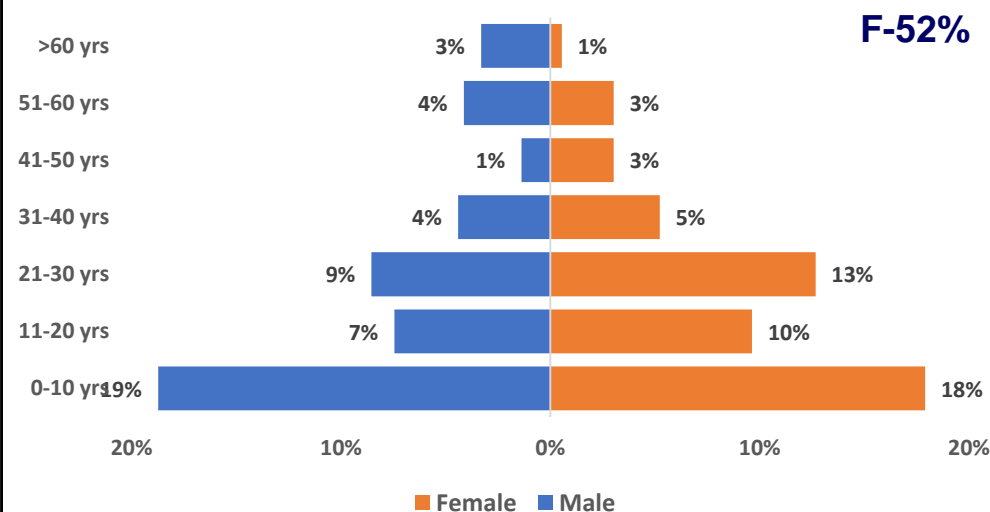
**422** Confirmed cases/1 Million

**10** Deaths in FDMN/Rohingya Refugee Camps

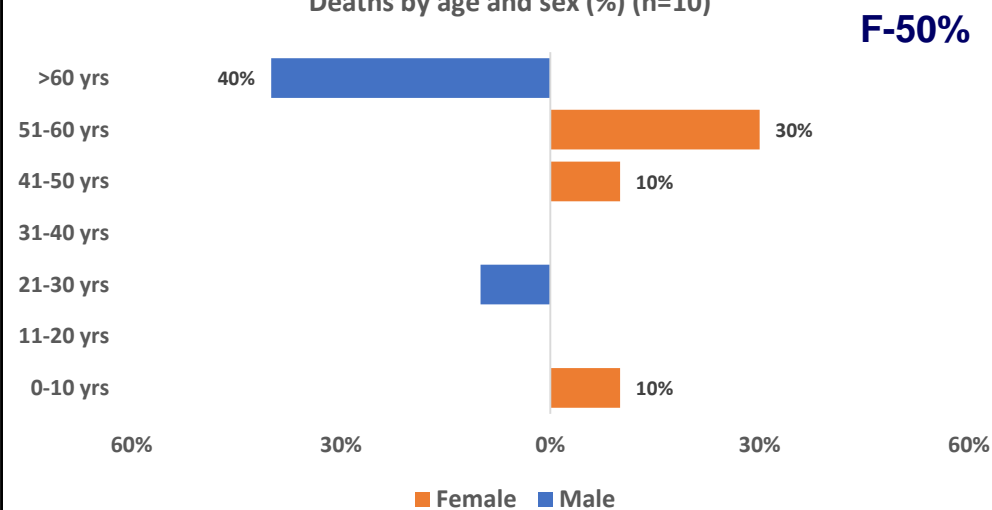
**12** Deaths/1 Million



## Age and sex distribution (%) (n=363)

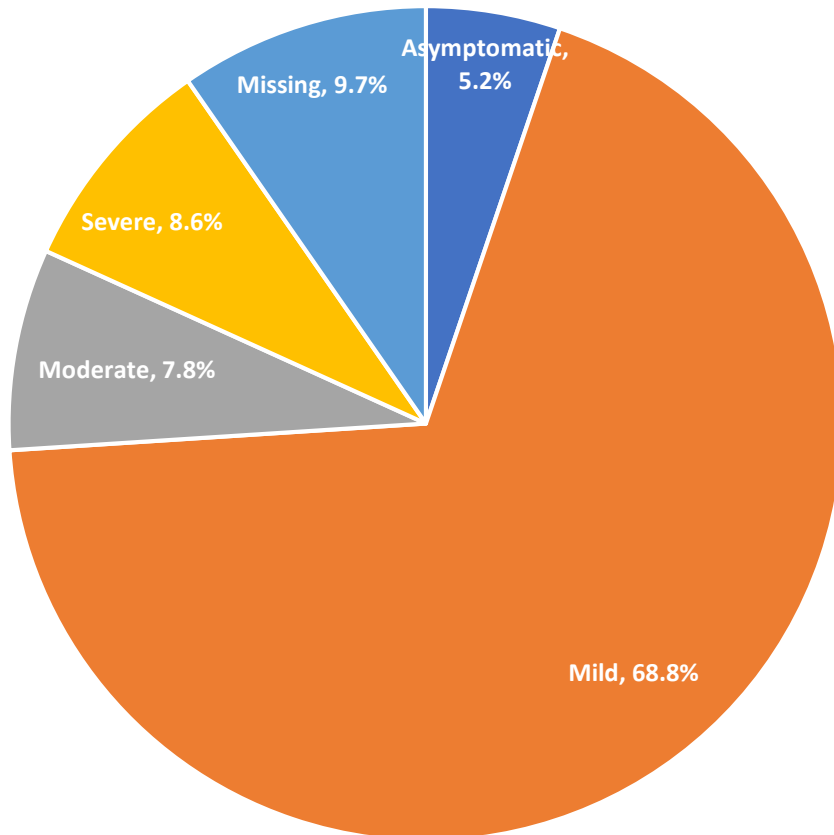


## Deaths by age and sex (%) (n=10)

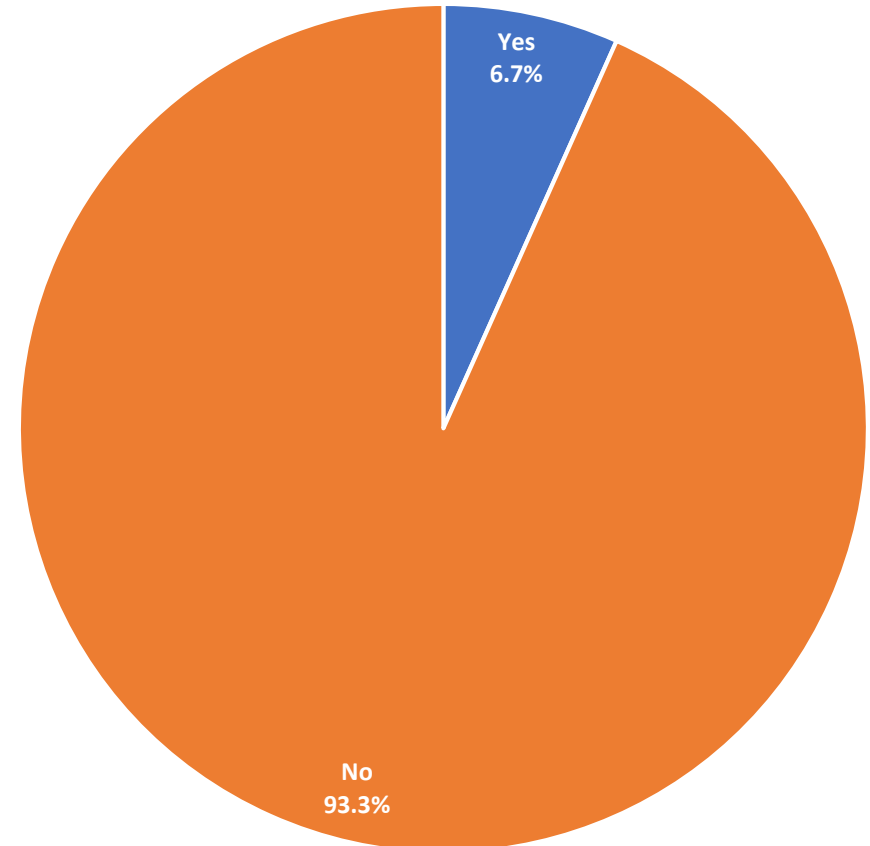


# Highlights: COVID-19

Severity of reported cases at presentation (n=269)



Did the case report at least 1 co-morbidity (n=269)



Source: Go.Data

# EWARS Reporting Updates

- Total 146/166 (88%) health facilities registered in EWARS
- Only 118/146 weekly reports received in week 49.
- Completeness and Timeliness for this week is 81%.
- Total 60 alerts were triggered in week 49.
- All alerts were reviewed and verified by WHO EWARS team which is less than as of previous week (70 in week 48).

# Highlights:

- Acute Respiratory Infection (18.4%), Diarrheal Diseases (5.4%) & Unexplained Fever (1.3%) are the diseases with highest proportional morbidity in week 49.
- Community-based mortality surveillance included SARI death in weekly reporting since week 28 and the reporting frequency changed since then from bi-weekly. Seventeen (17) SARI death has been reported so far.



# Diphtheria

2 suspected diphtheria case reported in go.data in week 49

A total of 9 186 case-patients were reported since 2017 to till date

- Confirmed = 341
- Probable = 2785
- Suspected = 6060

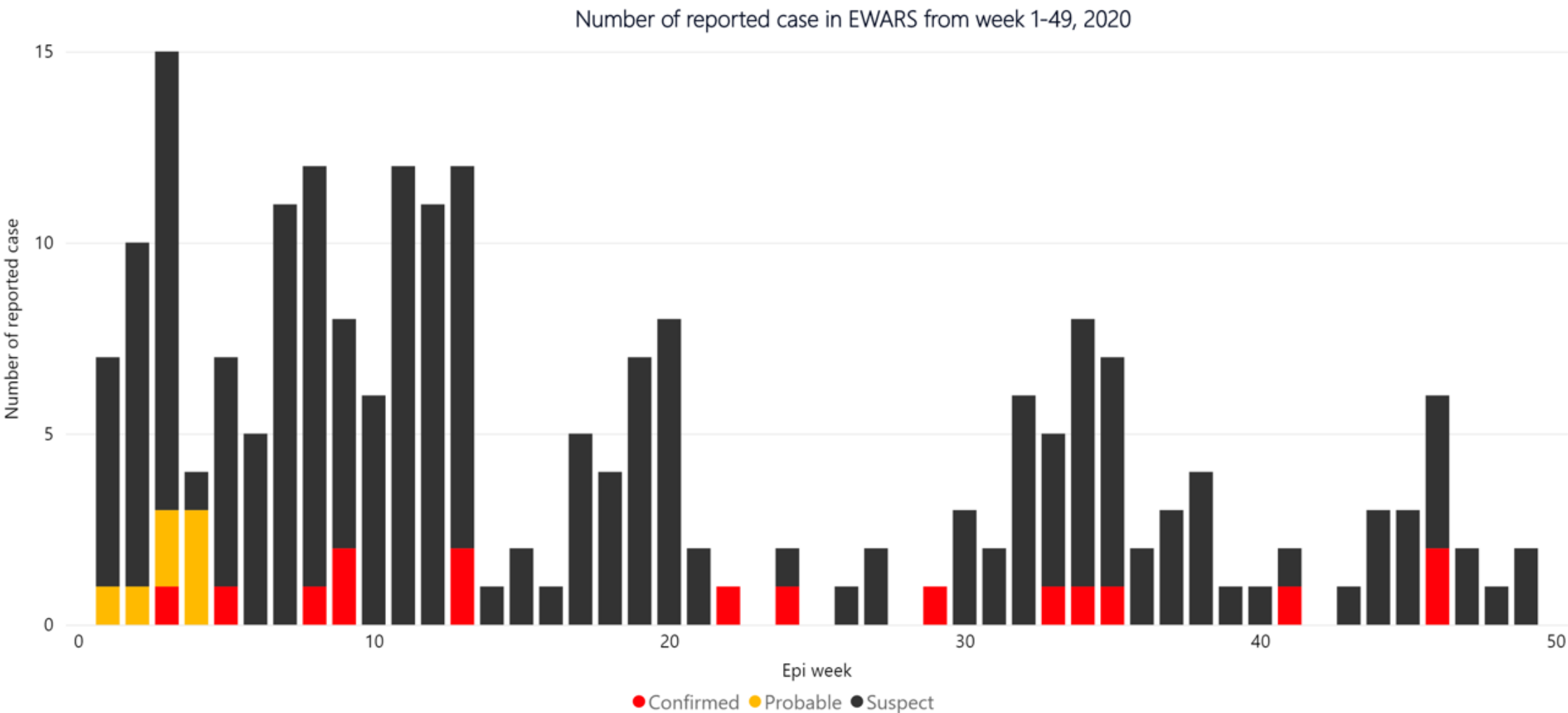
Total Case reported in 2020 = 219

- Confirmed = 16
- Probable = 7
- Suspected = 196

Last confirmed case was reported in Week 46 (9 November 2020)

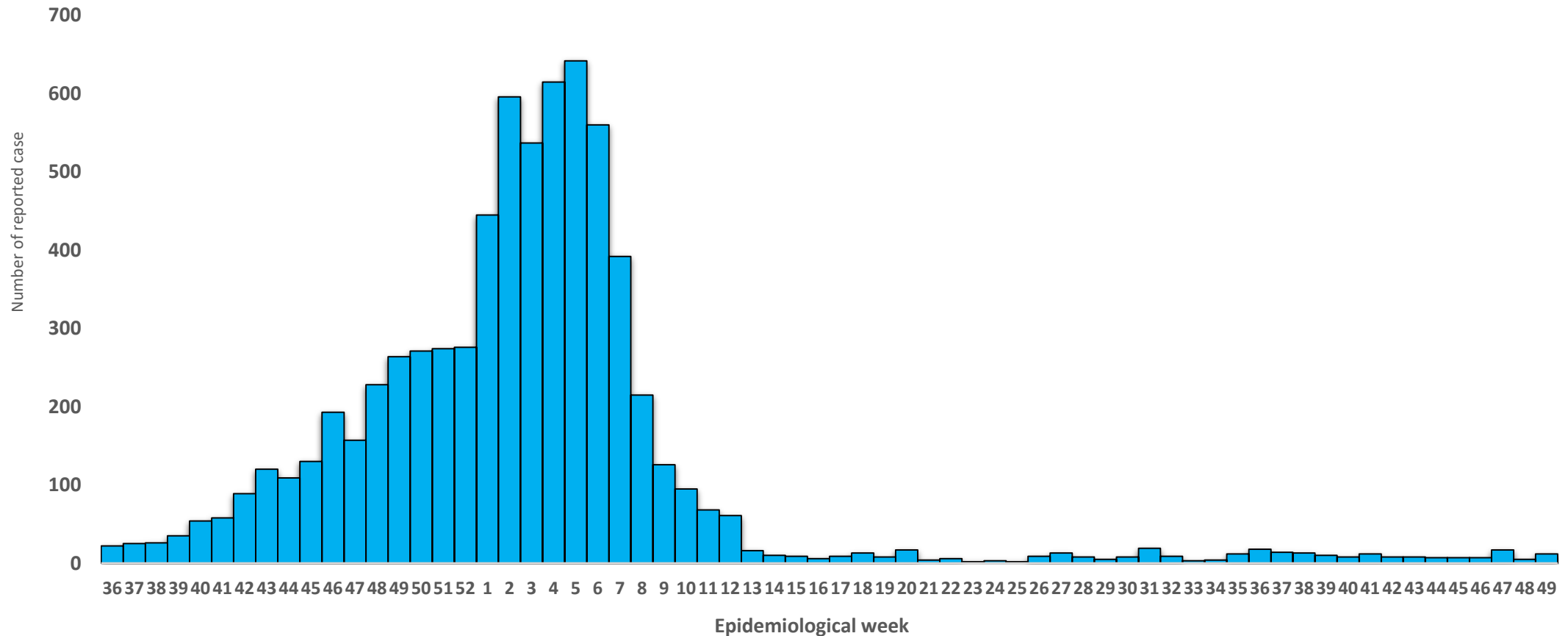
Total deaths reported is 47. Last death was reported on 25 October 2019

# Diphtheria



# Measles

Total number of Measles case reported in EWARS from week 36, 2019 to week 49, 2020

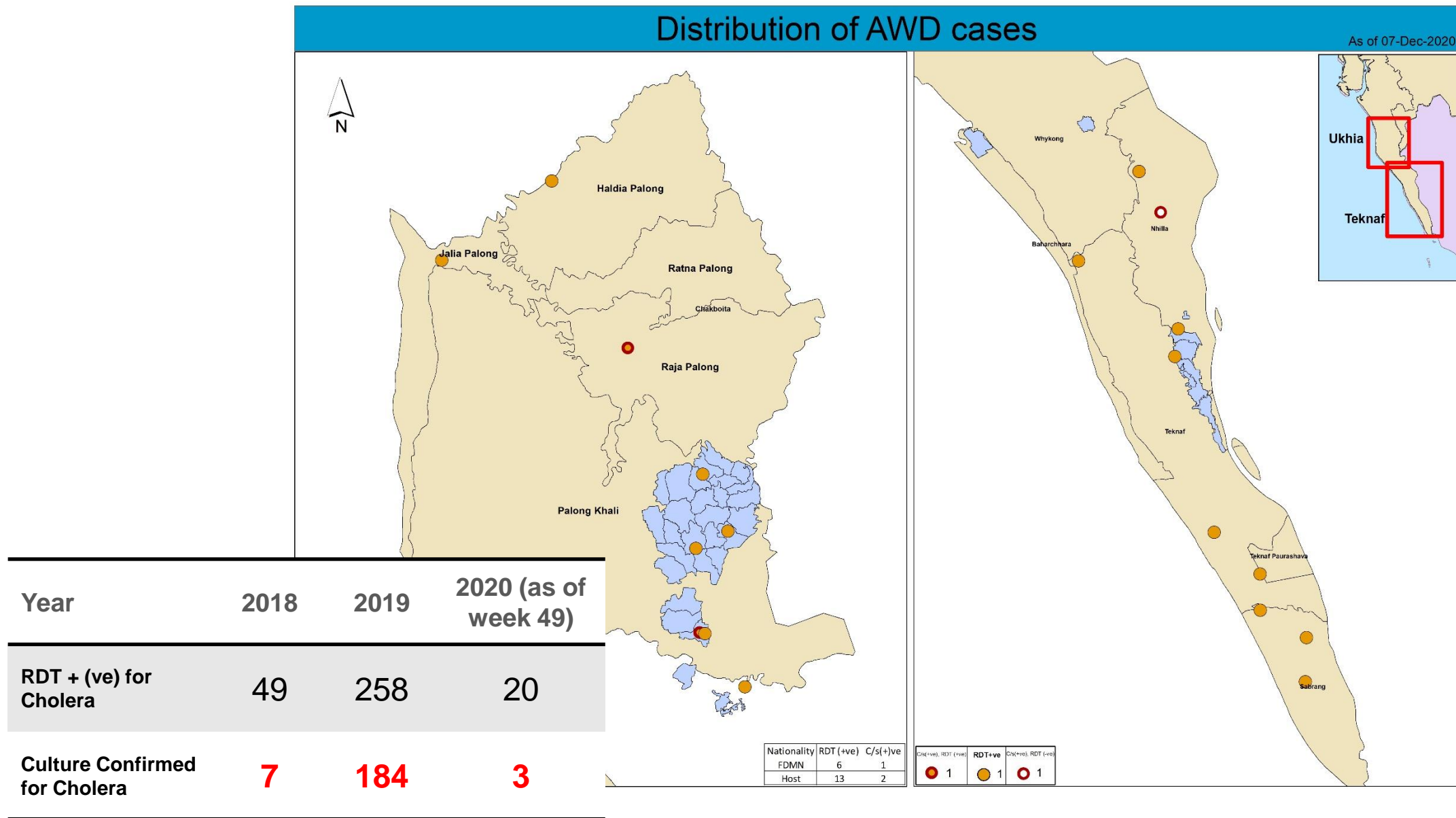


Total 12 suspected measles cases were reported through aggregated weekly reporting in EWARS in week 49. Aggregated weekly report showed 4,661 and individual case report (CRF) found 2,599 (56%) in 2020.

# Diarrhoeal Disease

- A total of 4,414 cases of diarrhoeal diseases reported in EWARS in week 49.
- Among which 2,903 cases (3.6%) reported as acute watery diarrhoea (AWD), 1,182 (1.5%) and 329 (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).

# Cholera Surveillance

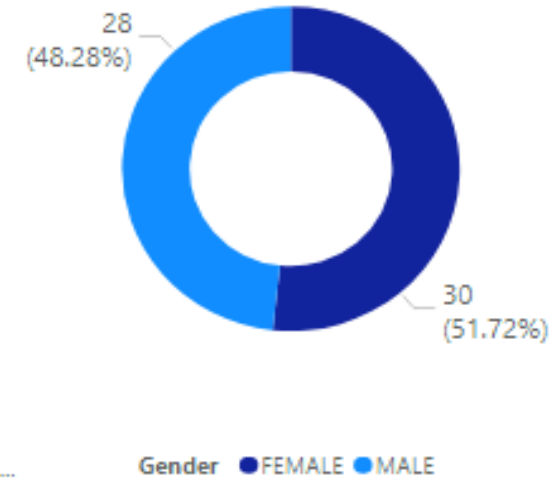
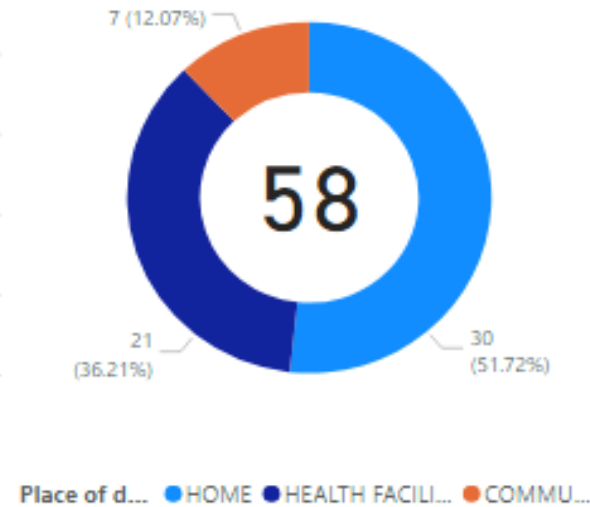
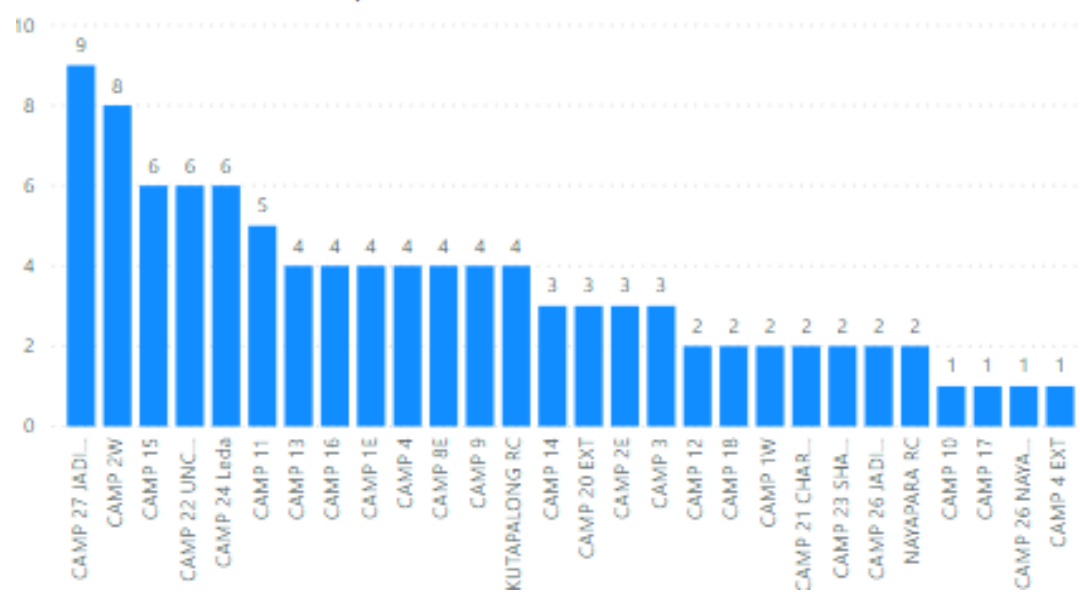


# Community-based Mortality surveillance

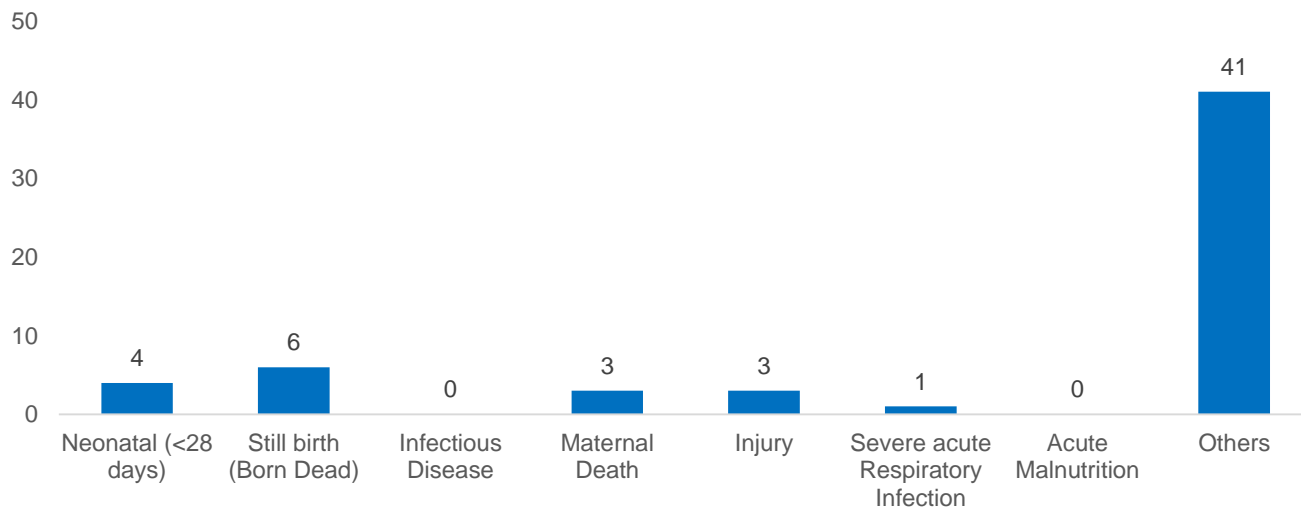
- In week 49 total of 58 deaths were recorded, 71% (n=41) were due to causes classified as “Others”, 10% (n=6) as Still birth (Born Dead), 7% (n=4) as Neonatal (<28 days old), 5% (n=3) as Injury and 2% (n=1) as Severe acute respiratory infection (SARI)
- Three mortality alert raised for women of reproductive age (12-49 years).
- 36.2% of deaths reported in the health facility, 51.7% of deaths reported in homes and 12.07% 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 causes of death (n=58)



# Bangladesh

Rohingya Emergency Response

Early Warning, Alert and  
Response System (EWARS)

Epidemiological Bulletin W49 2020



Ministry of Health and Family  
Welfare Bangladesh



World Health  
Organization



HEALTH SECTOR  
COX'S BAZAR



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## Sources of data

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

## Highlights W49 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**

W49	Cumulative (2020)	
<b>118</b>	<b>6850</b>	Number of weekly reports received
<b>79%</b>	<b>89%</b>	Completeness
<b>79%</b>	<b>81%</b>	Timeliness

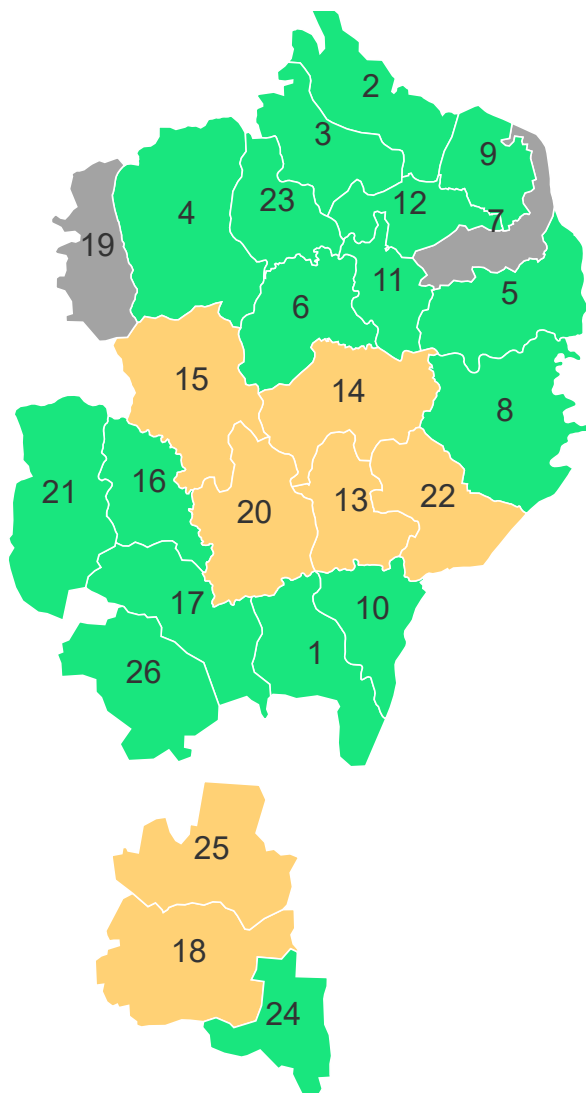
**Table 3 Alert performance indicators**

W49	Cumulative (2020)	
<b>60</b>	<b>3,109</b>	Total alerts raised
<b>100%</b>	<b>100%</b>	% verified
<b>0%</b>	<b>0%</b>	% auto-discarded
<b>0%</b>	<b>0%</b>	% undergoing risk assessment
<b>0%</b>	<b>0%</b>	% completed risk assessment

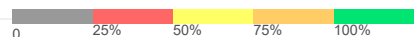
<sup>1</sup> Source: UNHCR. Bangladesh: Joint Government of Bangladesh- UNHCR Population Factsheet. 31 December 2019.

**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

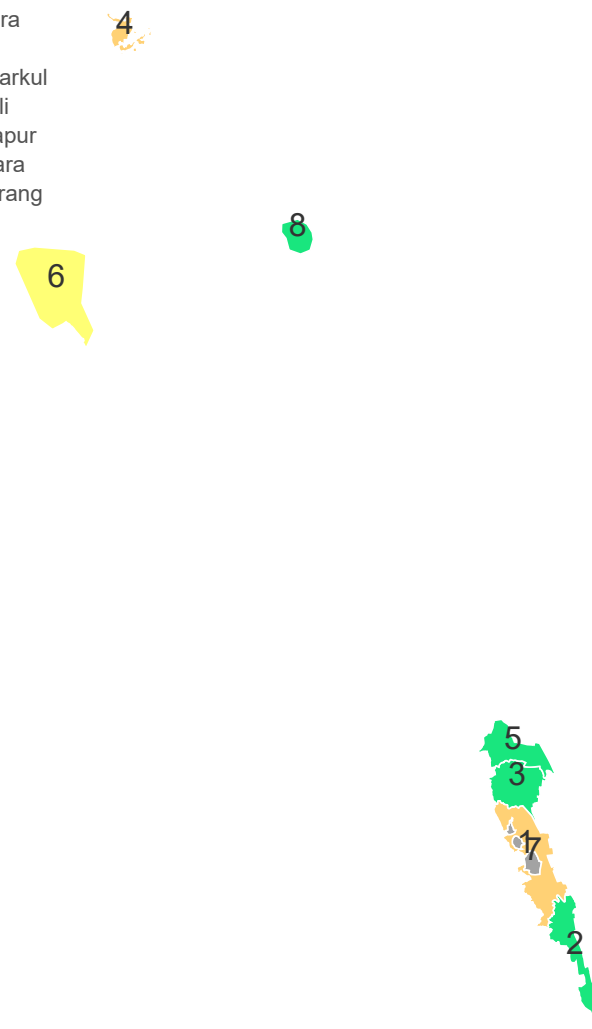


Completeness



**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



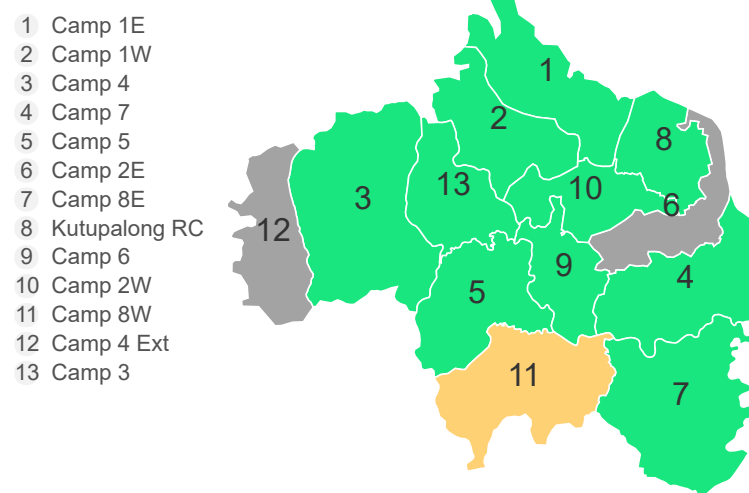
Completeness



**Table 4 | Performance by camp (W49 2020)**

Northern group	Reporting		Performance	
	# health facilities	# reports received	Completeness	Timeliness
Ukhia Northern Group				
Camp 1E	4	4	100%	100%
Camp 1W	4	4	100%	100%
Camp 2E	1	0	0%	0%
Camp 2W	2	2	100%	100%
Camp 3	6	6	100%	100%
Camp 4	6	5	100%	100%
Camp 4 Ext	1	0	0%	0%
Camp 5	5	4	80%	80%
Camp 6	2	2	100%	100%
Camp 7	6	5	83%	83%
Camp 8E	7	6	86%	86%
Camp 8W	6	4	67%	67%
Kutupalong RC	1	1	100%	100%

**Map 2 | Completeness by camp**



Completeness

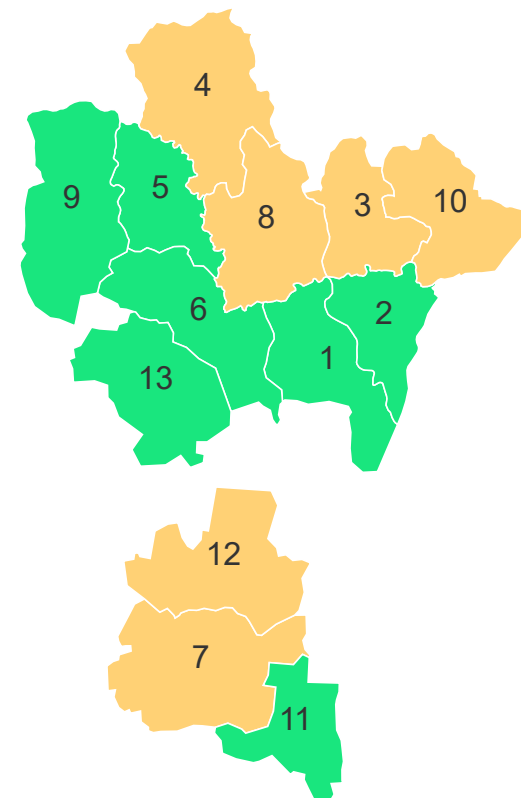


**Table 5 | Performance by camp (W49 2020)**

Southern group	Reporting		Performance	
	# health facilities	# reports received	Completeness	Timeliness
Ukhia Southern Group				
Camp 10	4	2	50%	50%
Camp 11	9	9	100%	100%
Camp 12	6	6	100%	100%
Camp 13	9	7	78%	78%
Camp 14	6	4	67%	67%
Camp 15	10	5	56%	56%
Camp 16	5	5	100%	100%
Camp 17	5	3	60%	60%
Camp 18	5	3	60%	60%
Camp 19	5	4	80%	80%
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



Completeness

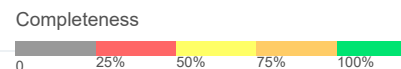
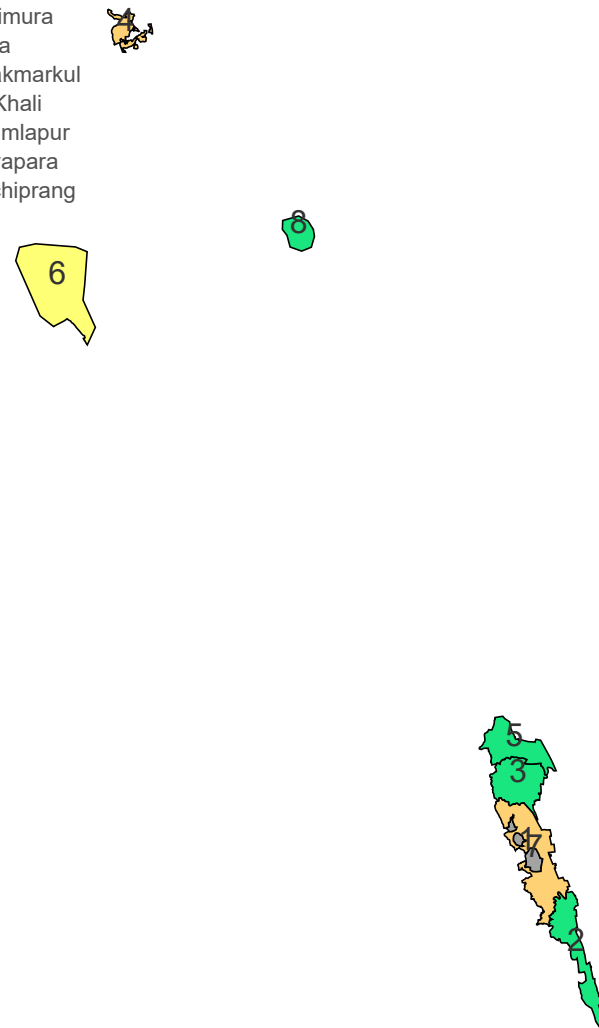


**Table 6** | Performance by camp (W49 2020)

Teknaf	Reporting		Performance	
	# health facilities	# reports received	Completeness	Timeliness
Ukhia Teknaf				
Camp 21 Chakmarkul	4	2	50%	50%
Camp 22 Unchiprang	5	3	75%	75%
Camp 23 Shamlapur	4	1	33%	33%
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



**Table 7** | Performance by partner (W49 2020)

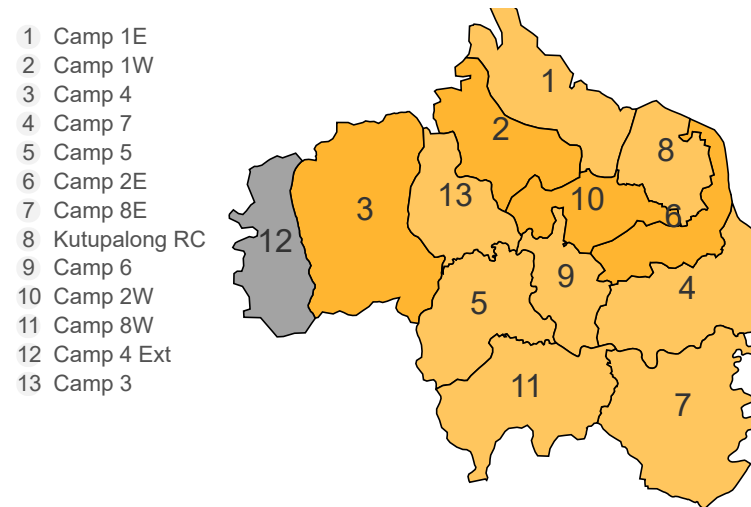
Partner	Performance		Reporting	
	# sites	# reports received	Completeness	Timeliness
BDRCS	9	7	78%	78%
BRAC	11	11	100%	100%
CARE	4	4	100%	100%
FHM	0	0		
FRNDS	12	10	83%	83%
GK	9	8	89%	89%
HMBDF	1	1	100%	100%
IOM	21	11	52%	52%
IRC	2	2	100%	100%
MSF	9	4	44%	44%
MoH	1	1	100%	100%
Hope	1	1	100%	100%
Medair	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	0	0%	0%

Table 8 | Performance by camp

Northern group	W49		Cumulative (2020)	
	# alerts	% verif.	# alerts	% verif.
Alerts Northern group				
Camp 1E	1	100%	72	100%
Camp 1W	3	100%	62	100%
Camp 2E	3	100%	66	100%
Camp 2W	3	100%	69	100%
Camp 3	1	100%	230	100%
Camp 4	3	100%	176	100%
Camp 4 Ext	0	0%	27	100%
Camp 5	1	100%	155	100%
Camp 6	1	100%	36	100%
Camp 7	2	100%	63	100%
Camp 8E	1	100%	40	100%
Camp 8W	2	100%	154	99%
Kutupalong RC	2	100%	27	100%

Map 5 | Number of alerts by camp



# of alerts



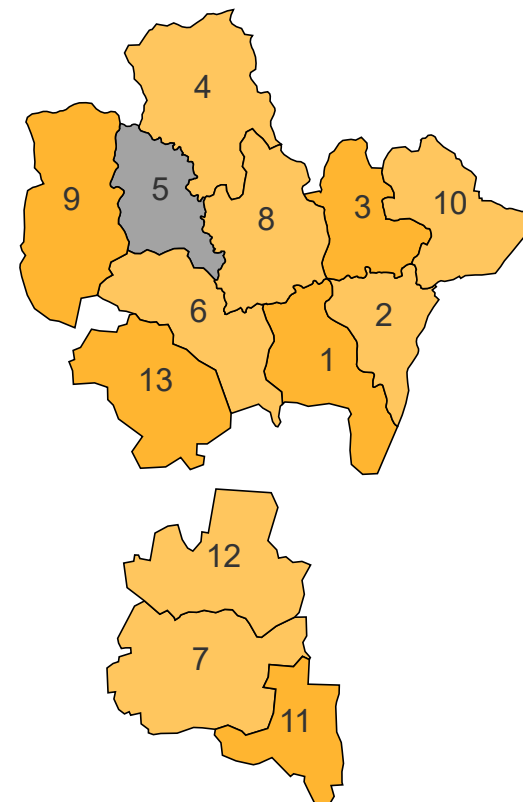


Table 9 | Performance by camp

Southern group	W49		Cumulative (2020)	
	# alerts	% verif.	# alerts	% verif.
Alerts Northern group				
Camp 10	3	100%	101	99%
Camp 11	2	100%	118	100%
Camp 12	3	100%	143	100%
Camp 13	4	100%	191	99%
Camp 14	2	100%	83	100%
Camp 15	2	100%	141	100%
Camp 16	3	100%	133	100%
Camp 17	1	100%	103	100%
Camp 18	2	100%	117	100%
Camp 19	1	100%	108	100%
Camp 20	0	0%	67	99%
Camp 20 Ext	3	100%	28	100%
Camp 9	1	100%	137	99%

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

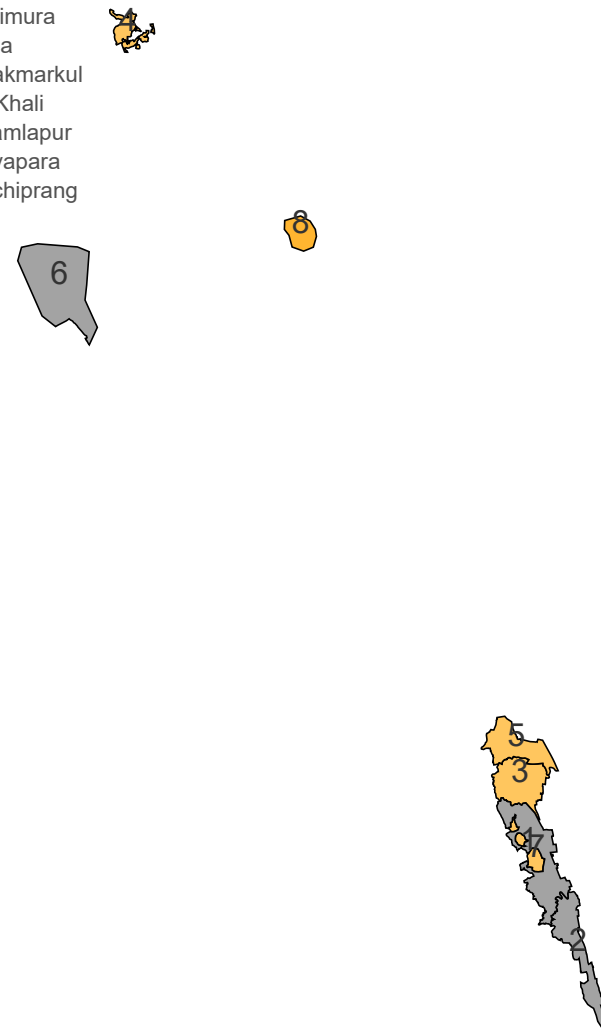


Table 10 | Performance by camp

Teknaf	W49		Cumulative (2020)	
	# alerts	% verif.	# alerts	% verif.
Alerts Northern group				
Camp 21 Chakmarkul	1	100%	63	100%
Camp 22 Unchiprang	5	100%	52	100%
Camp 23 Shamlapur	0	0%	60	100%
Camp 24 Leda	1	100%	30	100%
Camp 25 Ali Khali	1	100%	32	100%
Camp 26 Nayapara	0	0%	48	100%
Camp 27 Jadimura	0	0%	22	100%
Nayapara RC	1	100%	34	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	W49		Cumulative (2020)	
	# alerts	% verif.	# alerts	% verif.
<b>Indicator-based surveillance</b>				
Malaria	0	0%	0	0%
Measles	9	100%	850	100%
Bloody Diarr.	0	0%	0	0%
AFP	0	0%	17	100%
Meningitis	0	0%	22	100%
Haem. fever (susp.)	0	0%	9	100%
NNT	0	0%	2	100%
Unexp. fever	0	0%	230	100%
AWD	3	100%	318	100%
ARI	6	100%	331	100%
AJS	0	0%	115	100%
Varicella (Susp.)	0	0%	12	100%
Suspected COVID-19	0	0%	0	0%
<b>Event-based surveillance</b>				
EBS total	0	0%	181	100%

**Table 12** | Risk assessment

W49	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:

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. Feroz Hayat Khan  
NPO (Disease Surveillance & Epidemiology)  
World Health Organization  
Cox's Bazar, Bangladesh  
Telephone: +88 017 0120 2994  
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>



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 W49 2020



Ministry of Health and Family  
Welfare Bangladesh



World Health  
Organization



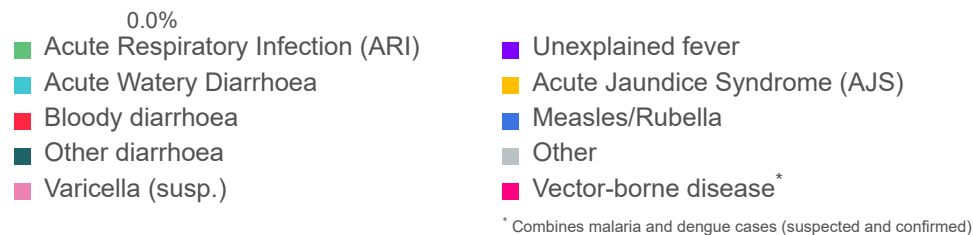
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# Proportional morbidity

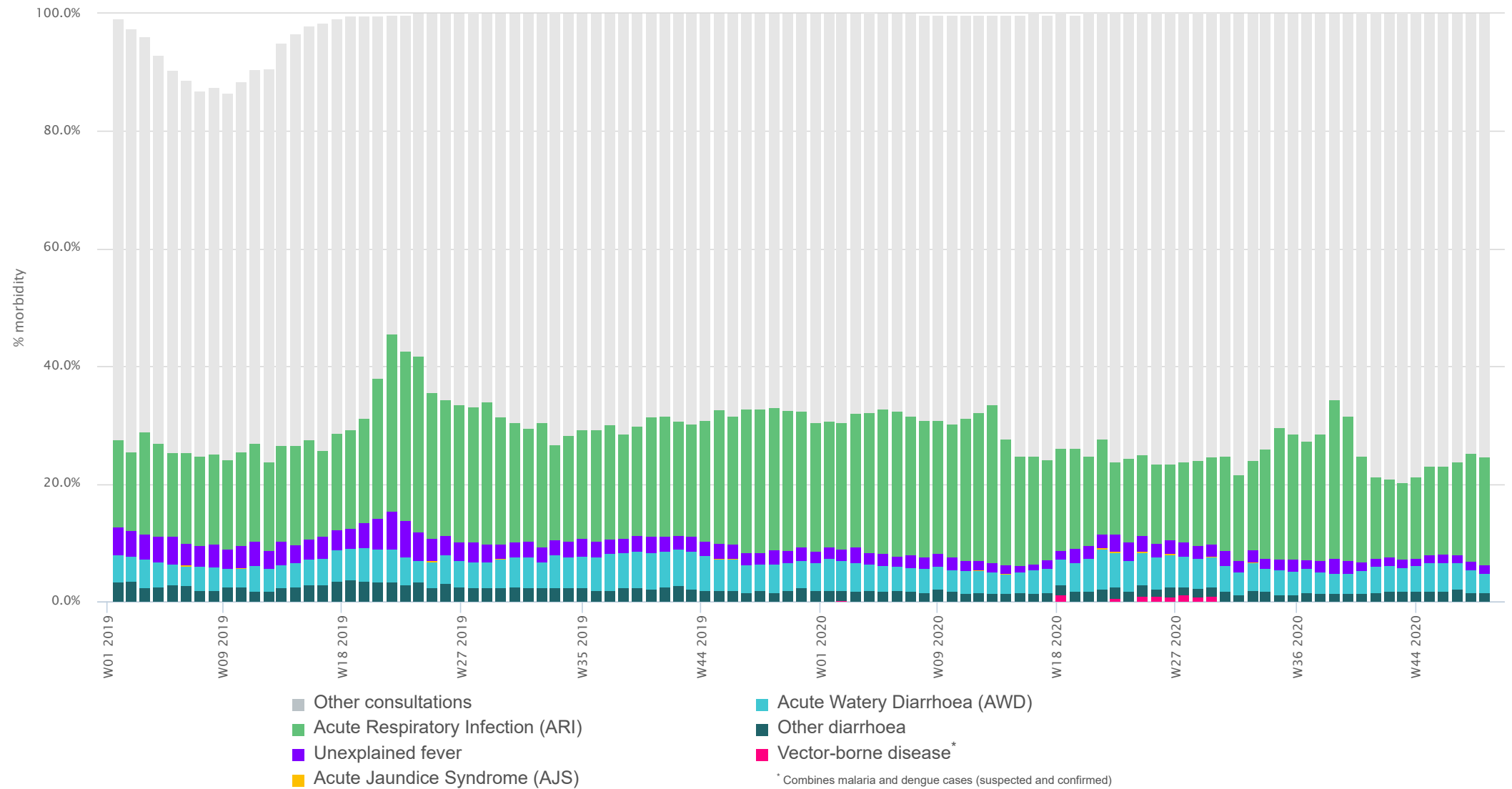
**Figure 1 |** Proportional morbidity (W49 2020)



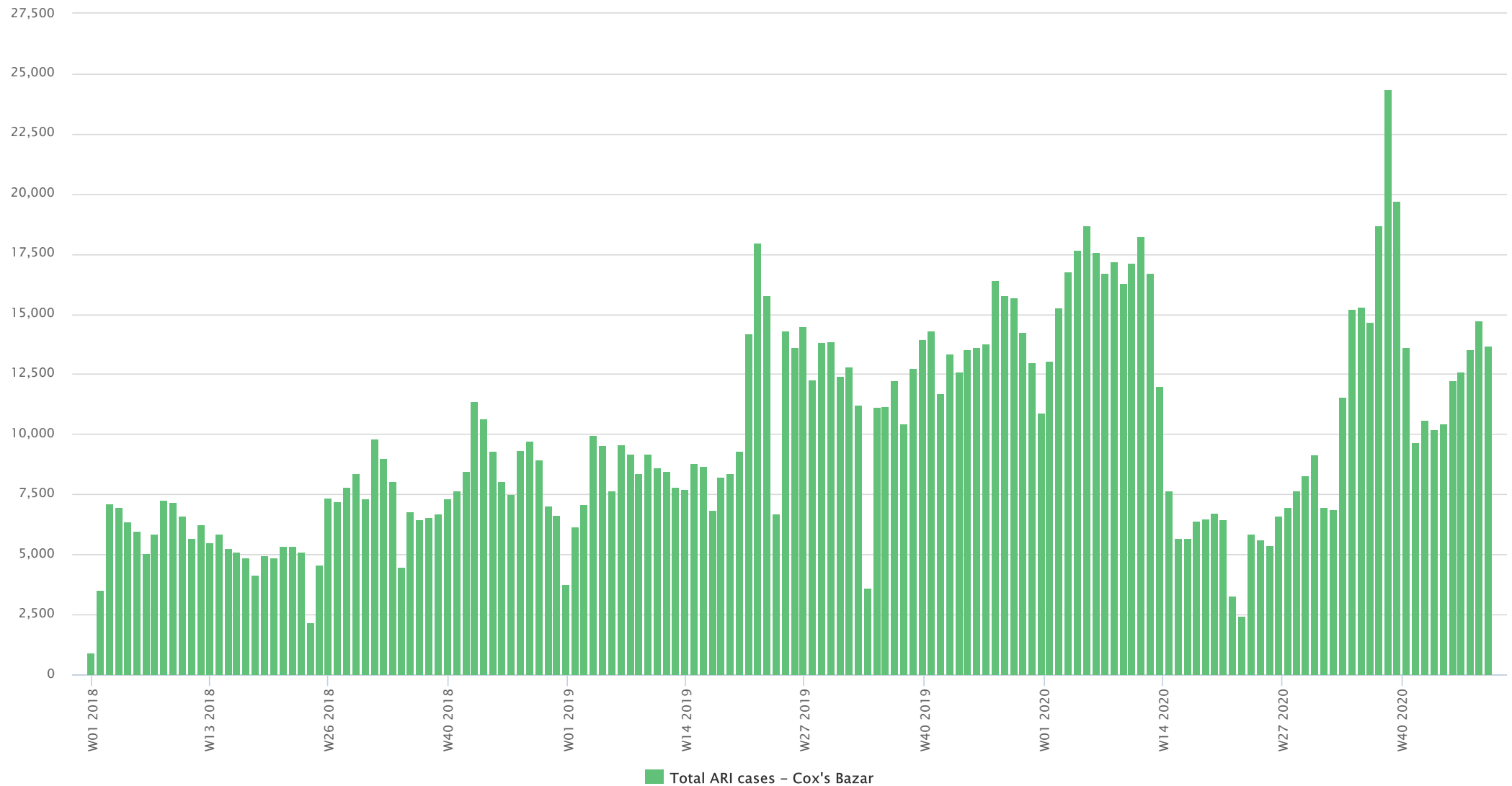
Disease	W49		2020	
	# cases	% morbidity	# cases	% morbidity
AWD	2,585	3.5%	131,954	4.4%
Bloody diarr.	291	0.4%	15,272	0.5%
Other diarr.	1,123	1.5%	49,448	1.6%
Susp. Varicella	14	0.0%	1,874	0.1%
ARI	13,699	18.4%	577,355	19.1%
Measles/Rub.	10	0.0%	4,626	0.2%
AFP	0	0.0%	15	0.0%
Susp. menin.	0	0.0%	78	0.0%
AJS	6	0.0%	919	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.)	0	0.0%	3,505	0.1%
Dengue (conf.)	0	0.0%	3	0.0%
Dengue (susp.)	0	0.0%	15	0.0%
Unexpl. fever	986	1.3%	56,393	1.9%
Sev. Malnut.	33	0.0%	1,272	0.0%
Inj./Wounds	1,450	1.9%	75,406	2.5%
Other	54,374	72.9%	2,099,605	69.6%
<b>Total</b>	<b>73,604</b>	<b>100%</b>	<b>3,018,748</b>	<b>100%</b>

## Trend in consultations and key diseases

**Figure 2** | Trend in proportional morbidity for key diseases (W49)



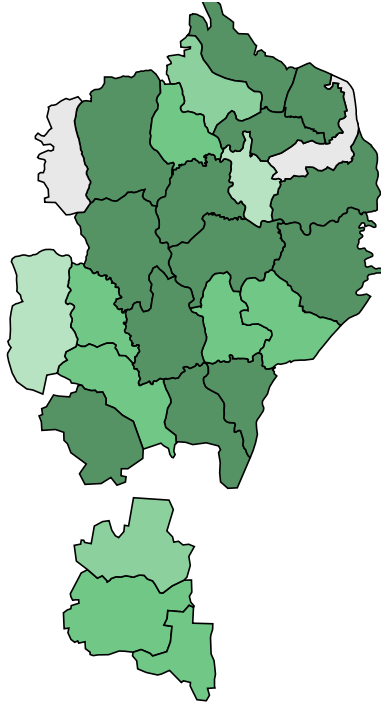
**Figure 3** | Trend in number of cases over time (W38 2017 - W49 2020)



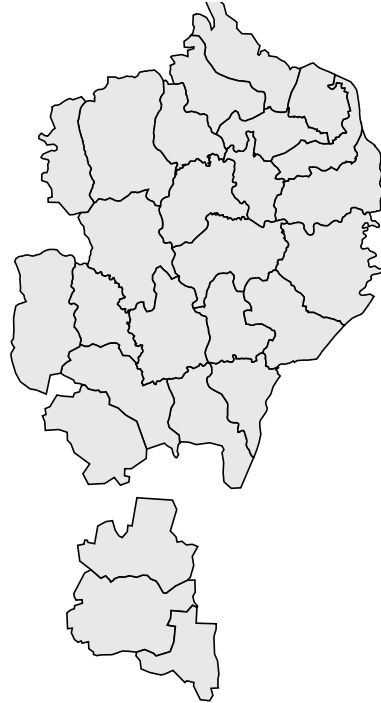


**Map 1** | Map of cases by camp (W49 2020)

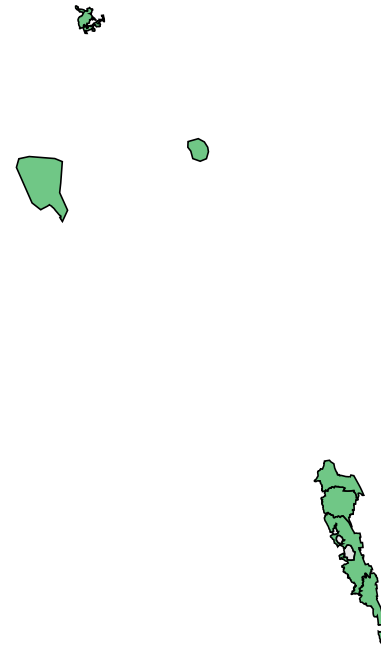
**a. Ukhia** | Number of cases



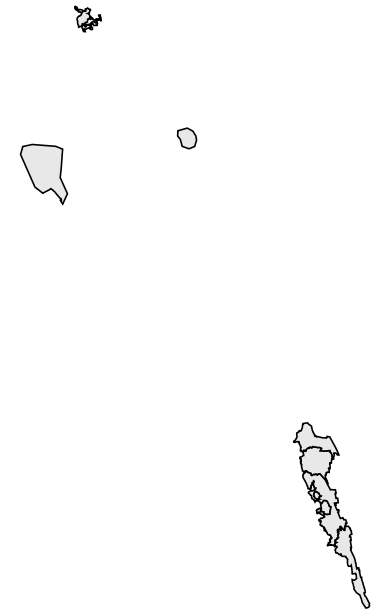
**b. Ukhia** | Number of alerts



**c. Teknaf** | Number of cases



**d. Teknaf** | Number of alerts



## Map legend

Number of cases



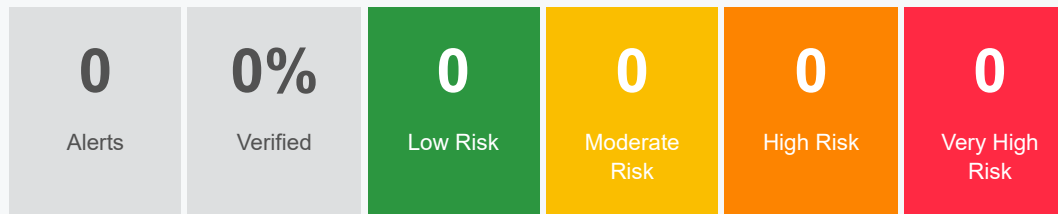
Number of alerts



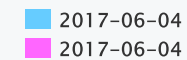
## Alert threshold

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

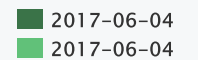
## Alert management (W49 2020)



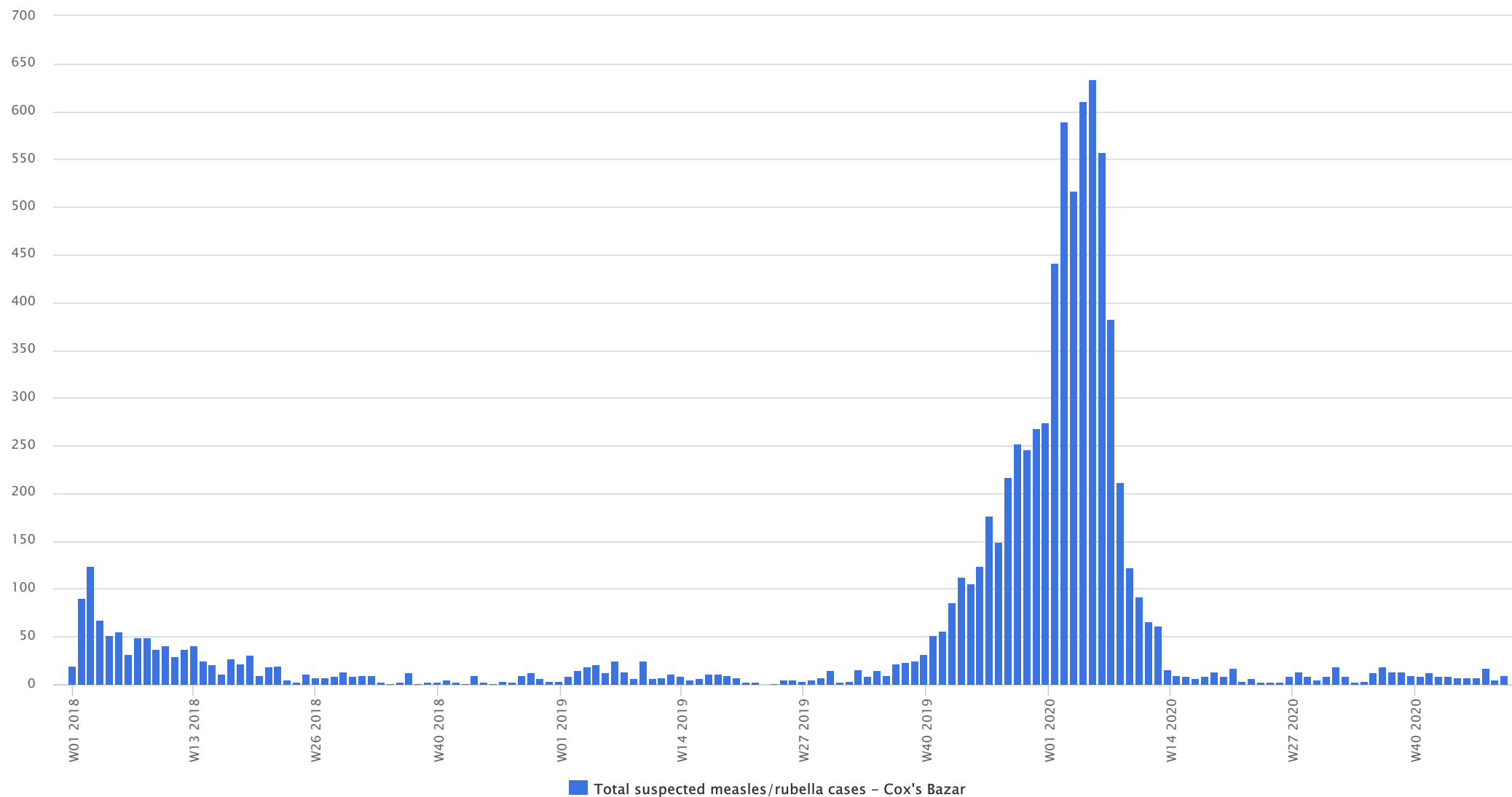
## Figure | % sex



## Figure | % age

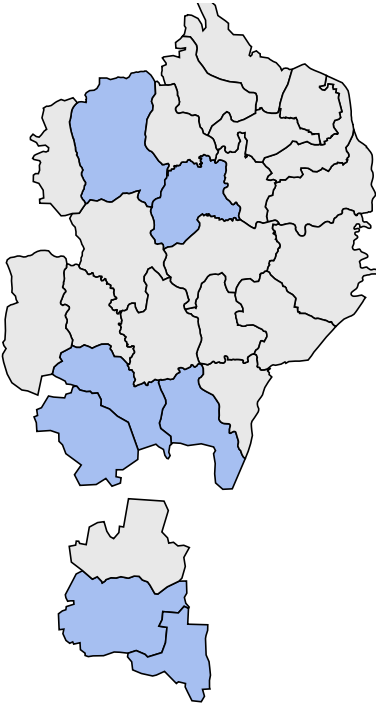


**Figure 4** | Trend in number of suspected cases over time (W38 2017 - W49 2020)

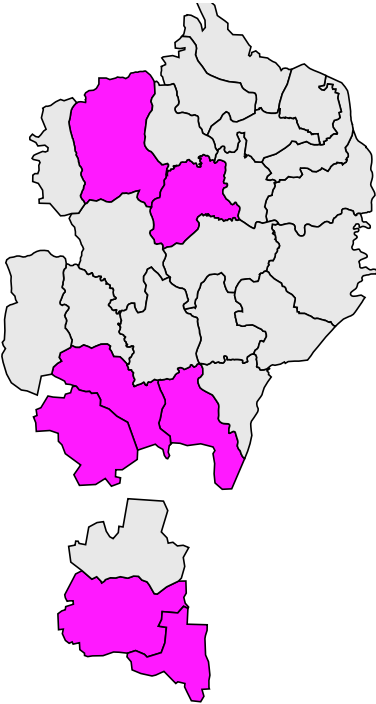


Map 2 | Map of cases by camp (W49 2020)

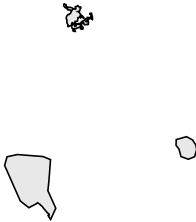
a. Ukhia | Number of cases



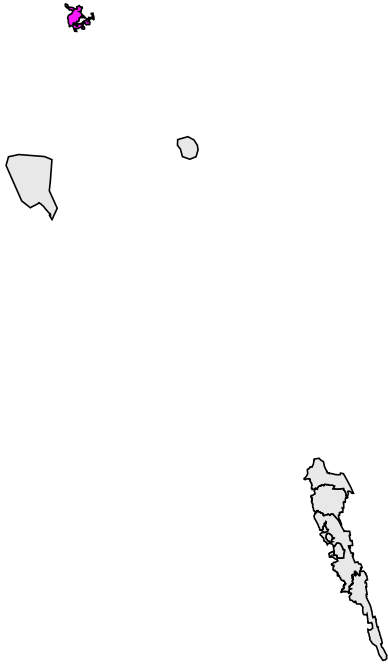
b. Ukhia | Number of alerts



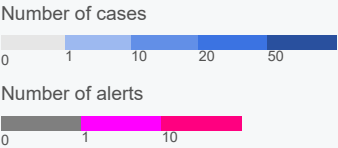
c. Teknaf | Number of cases



d. Teknaf | Number of alerts



Map legend



Alert threshold  
1 case. Source: IEDCR

Alert management (W49 2020)

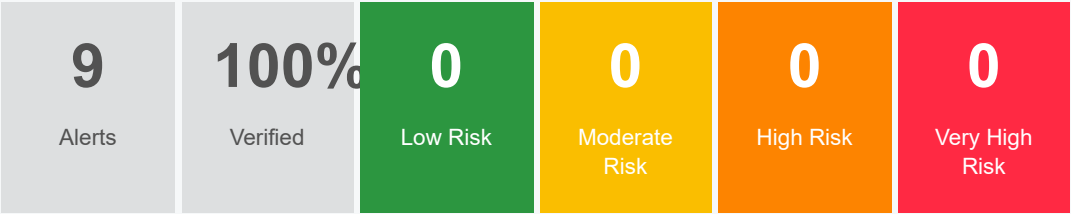


Figure | % sex

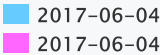


Figure | % age

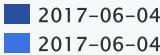
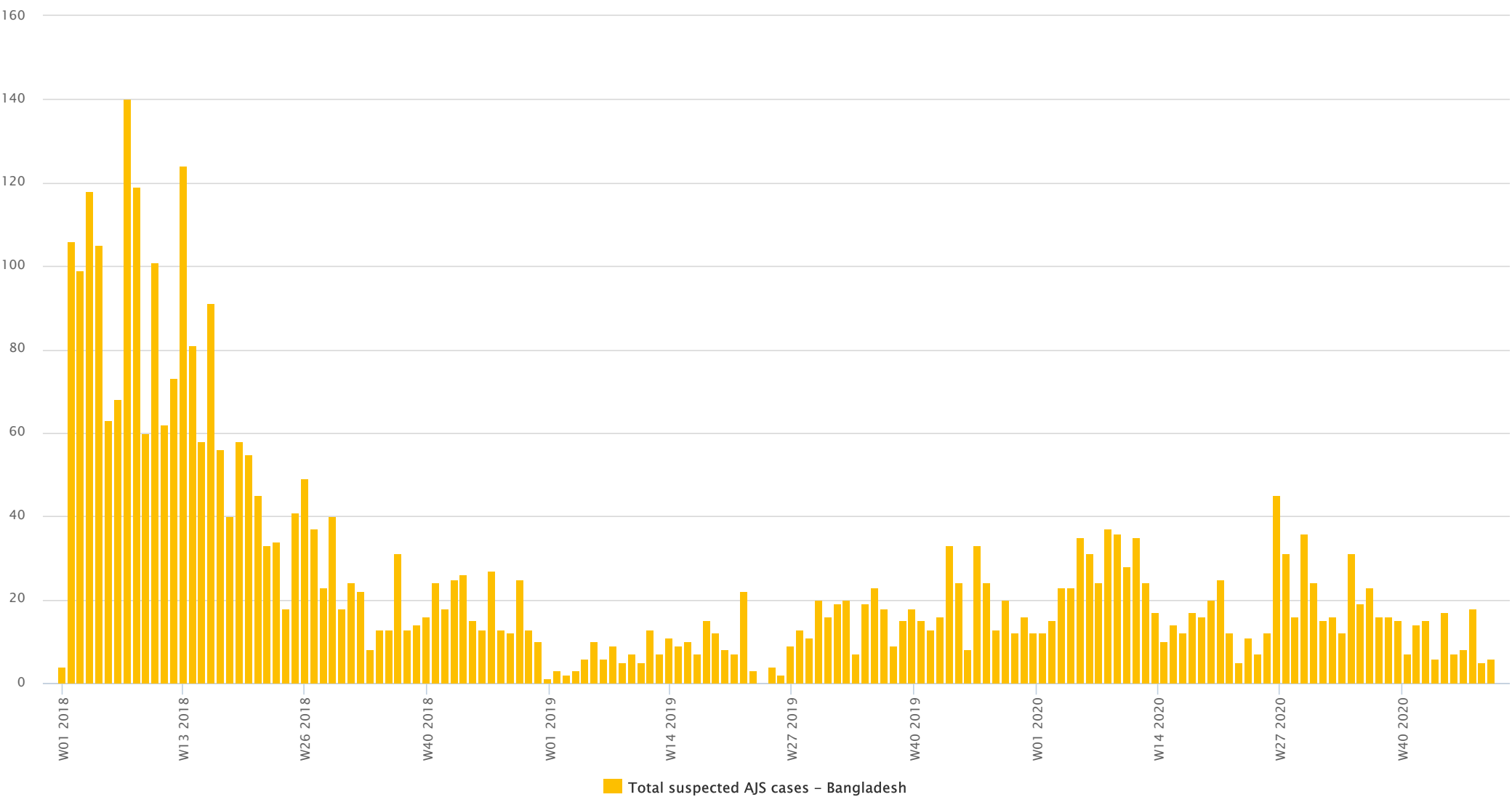
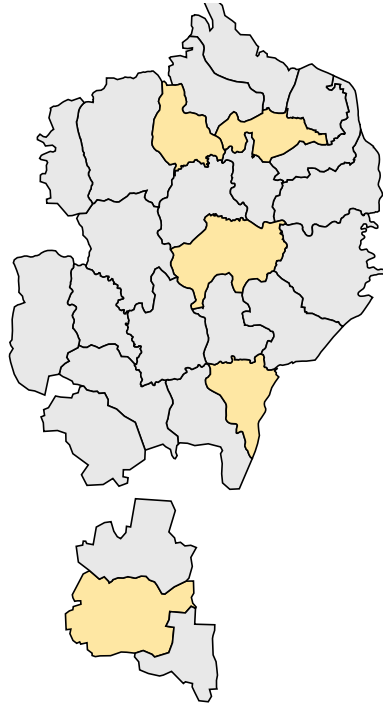


Figure 5 | Trend in number of cases over time (W38 2017 - W49 2020)

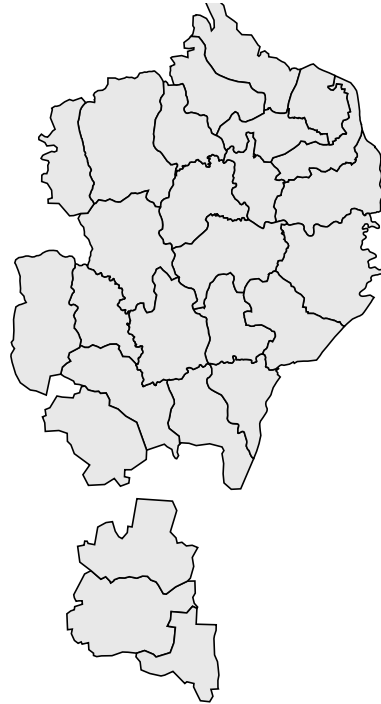


**Map 3 | Map of cases by camp (W37 2017 - W49 2020)**

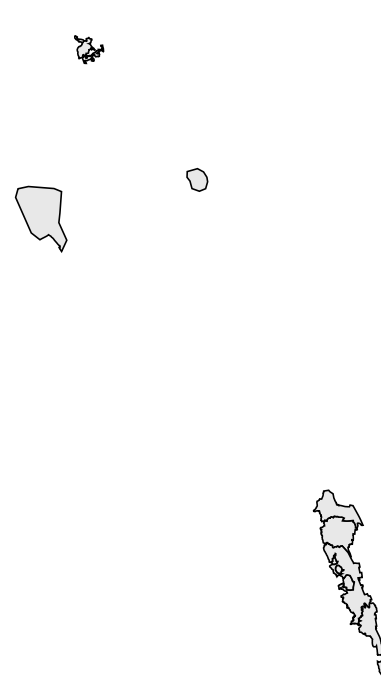
**a. Ukhia | Number of cases**



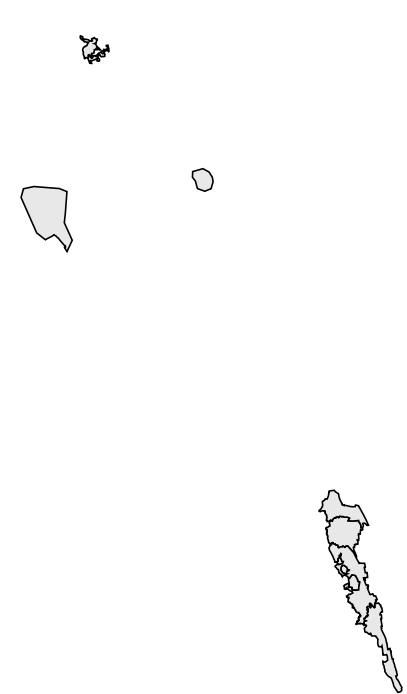
**b. Ukhia | Number of alerts**



**c. Teknaf | Number of cases**



**d. Teknaf | Number of alerts**

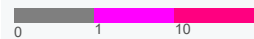


## Map legend

Number of cases



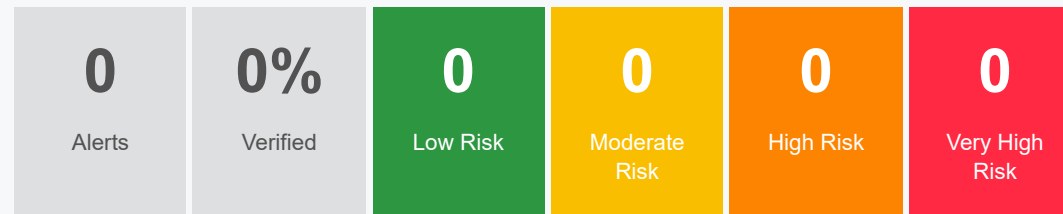
Number of alerts



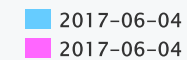
## Alert threshold

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

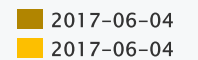
## Alert management (W49 2020)



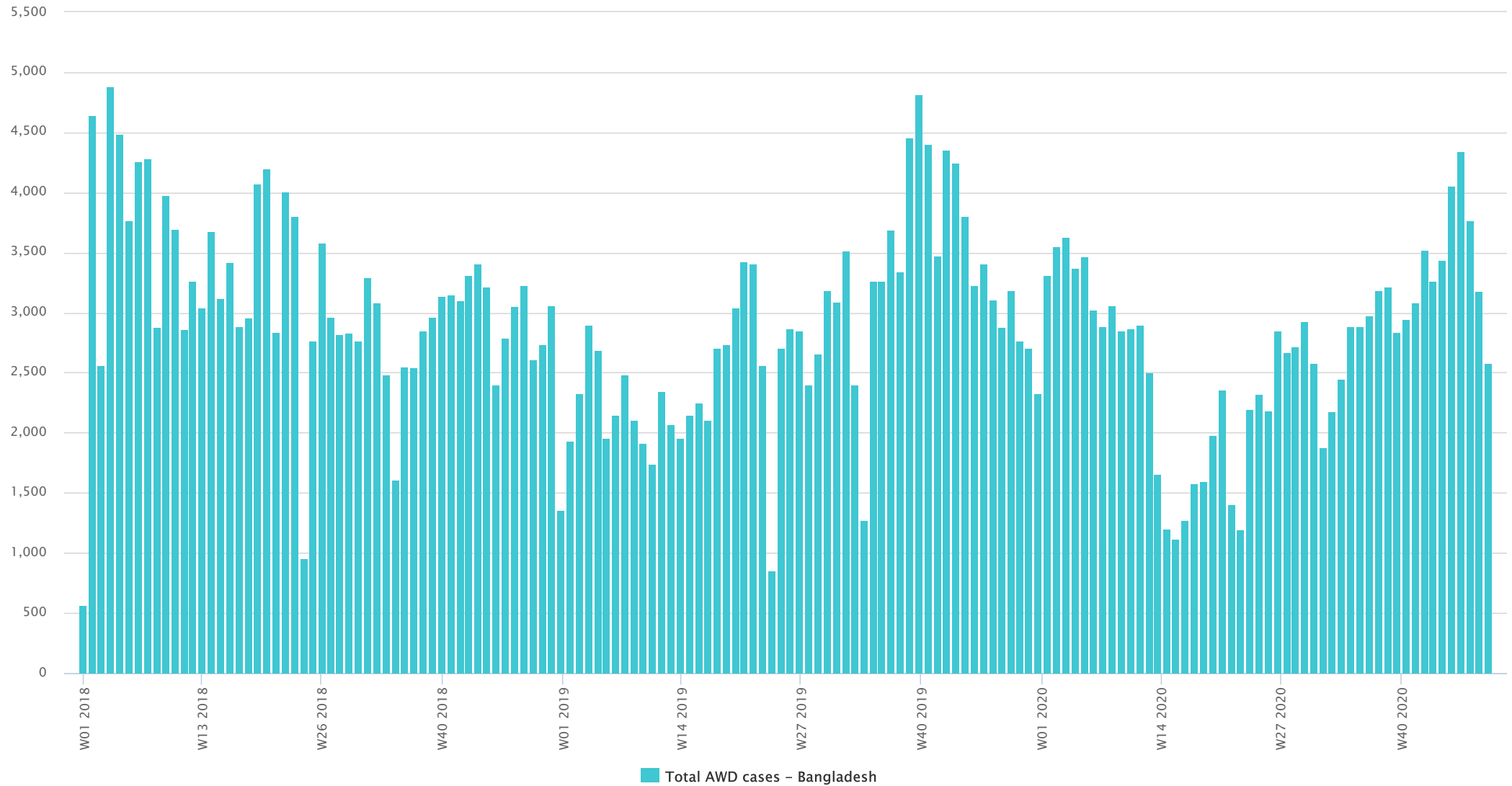
## Figure | % sex



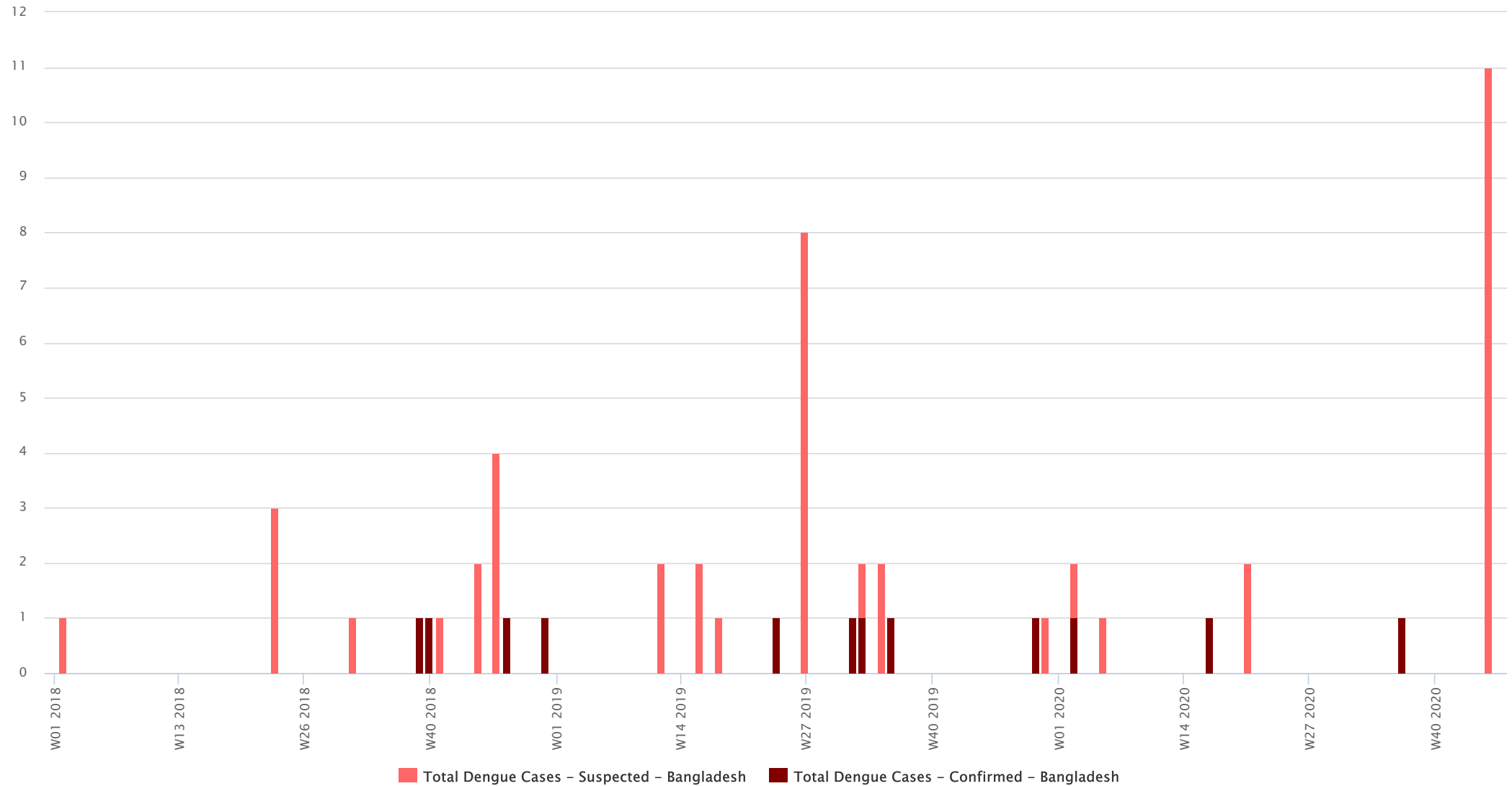
## Figure | % age



**Figure 6** | Trend in number of cases over time (W38 2017 - W49 2020)



**Figure 7** | Trend in number of cases over time (W38 2017 - W49 2020)

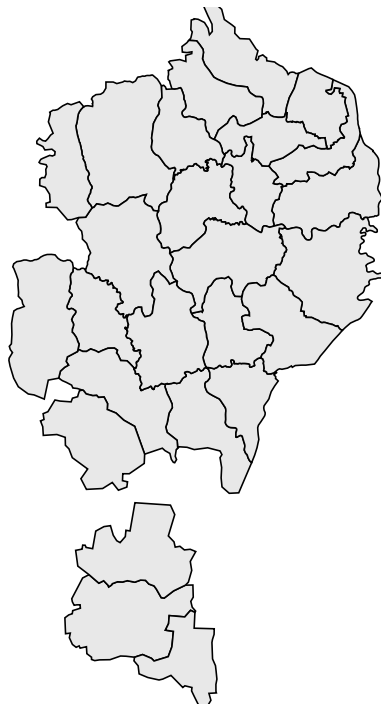


**Map 4 | Map of cases by camp (W37 2017 - W49 2020)**

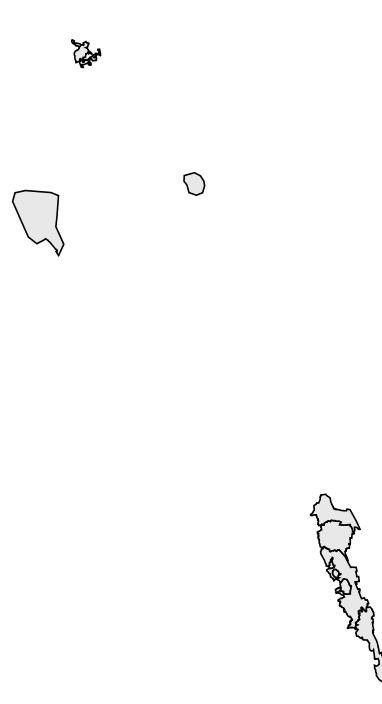
**a. Ukhia | Number of cases**



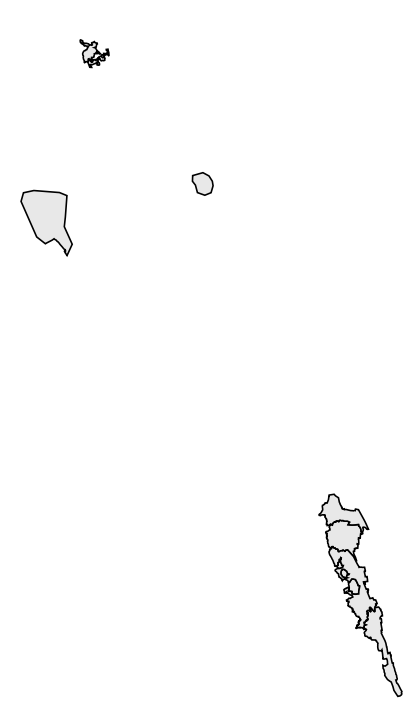
**b. Ukhia | Number of alerts**



**c. Teknaf | Number of cases**

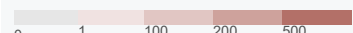


**d. Teknaf | Number of alerts**



## Map legend

Number of cases



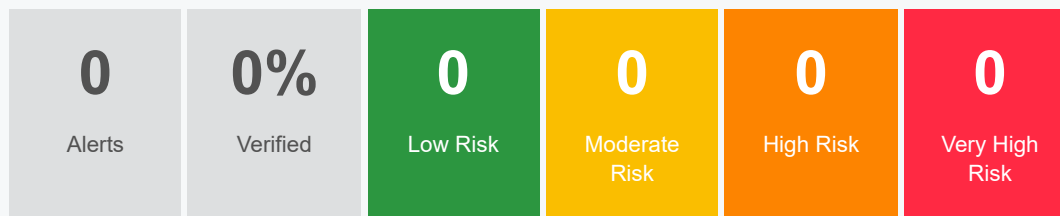
Number of alerts



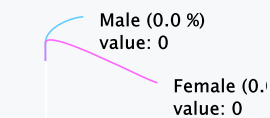
## Alert threshold

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

## Alert management (W49 2020)



## Figure | % sex



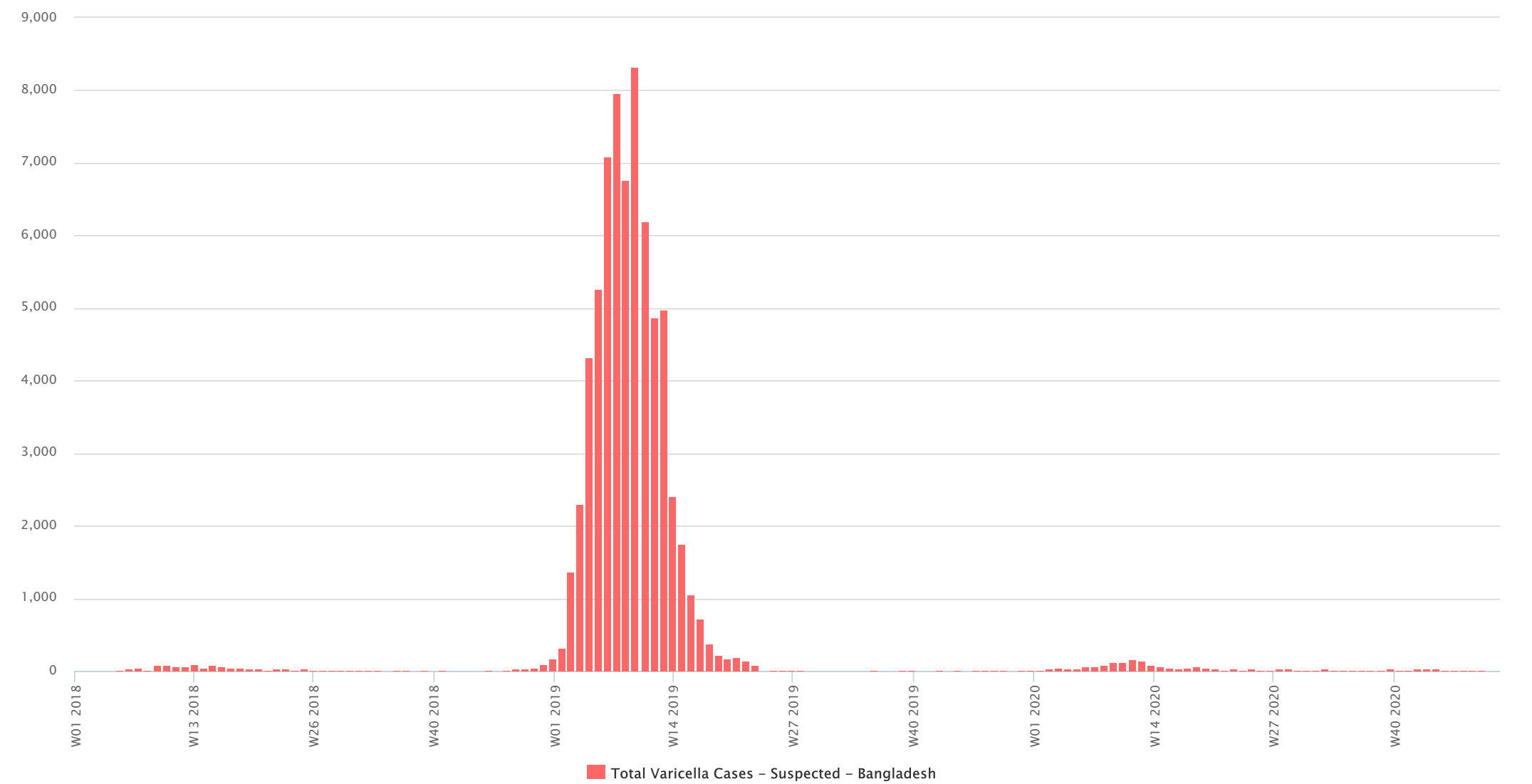
Male Female

## Figure | % age

2017-06-04  
2017-06-04

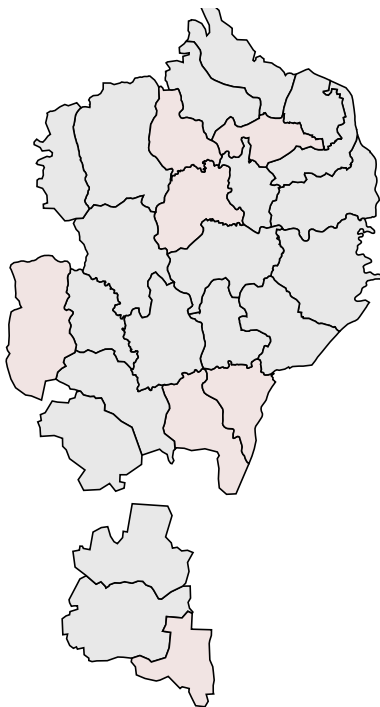


Figure 7 | Trend in number of cases over time (W38 2017 - W49 2020)

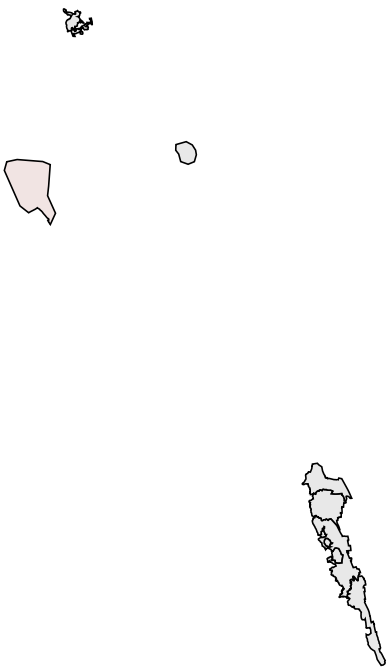


Map 4 | Map of cases by camp (W37 2017 - W49 2020)

a. Ukhia | Number of cases



c. Teknaf | Number of cases



Map legend

Number of cases

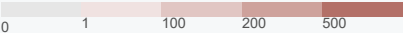


Figure | % sex

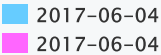
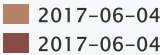


Figure | % age



## 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. Feroz Hayat Khan  
NPO(Disease Surveillance & Epidemiology)  
World Health Organization  
Cox's Bazar, Bangladesh

Telephone: +88 017 0120 2994

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>

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