



# Epidemiological Highlights

Week 31 (2-8 Aug 2021)



**World Health  
Organization**

# Highlights: COVID-19

As of week 31, (2-8 Aug 2021) there are 2,577 confirmed cases of COVID-19 (SARS-CoV-2), 54,796 samples were tested, total positivity rate 4.7%.

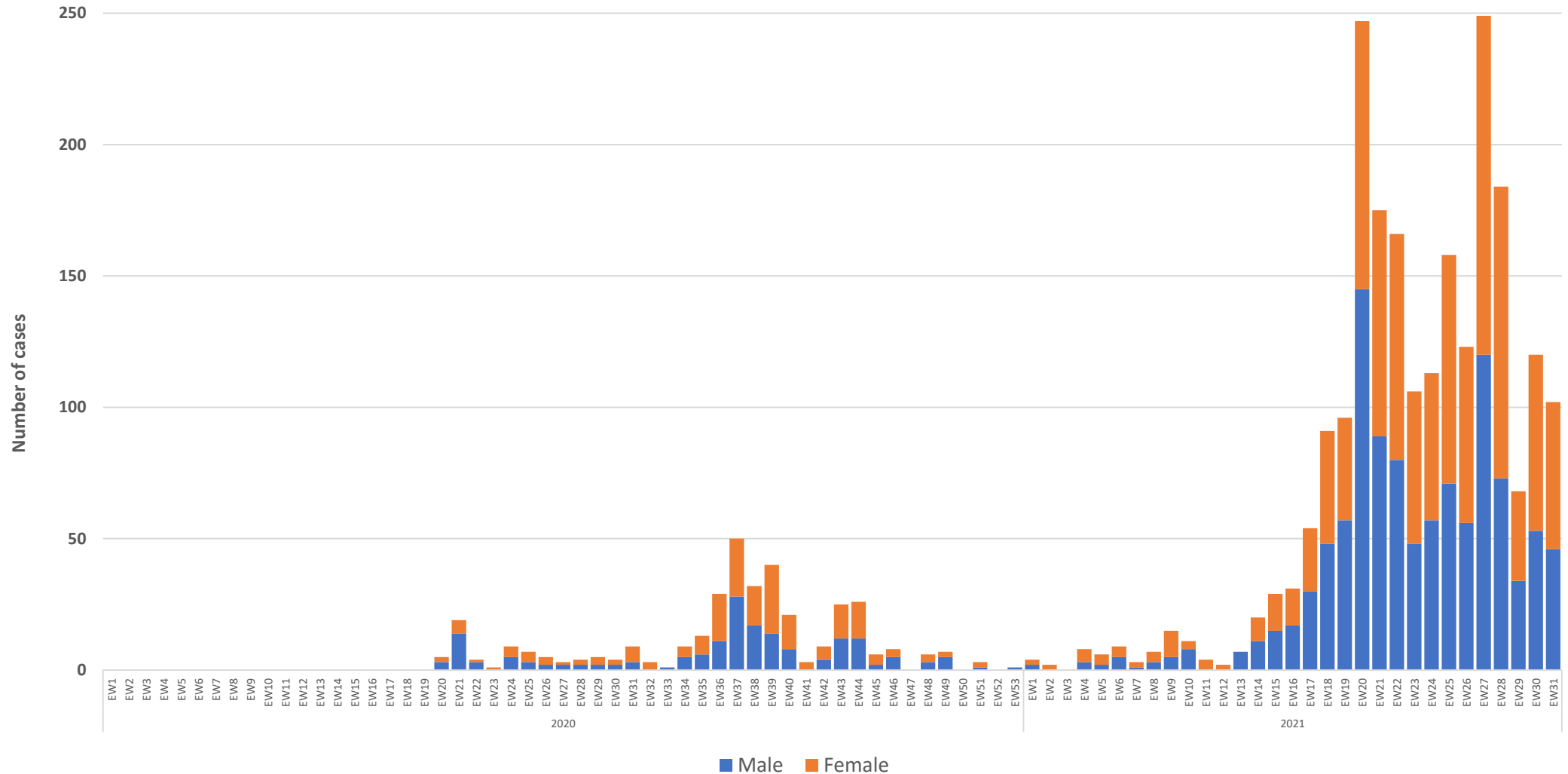
This week (week 31), 102 new confirmed cases detected, 1,180 samples were tested, test positivity was 8.6%.

As of this week (week 31)

- Median age of tested and confirmed cases is 11 (0-120) and 22 (0-100) years
- Female among tested and confirmed cases is 54% and 51%
- All 34/34 camps have confirmed cases (C3-160, C2W-152, C24-149, C15-142 and C17-138)
- A total of 28 deaths from COVID-19 with the case fatality rate 1.1%
- Cases per million in last 7 days 118.6, change in last 7 days -15%

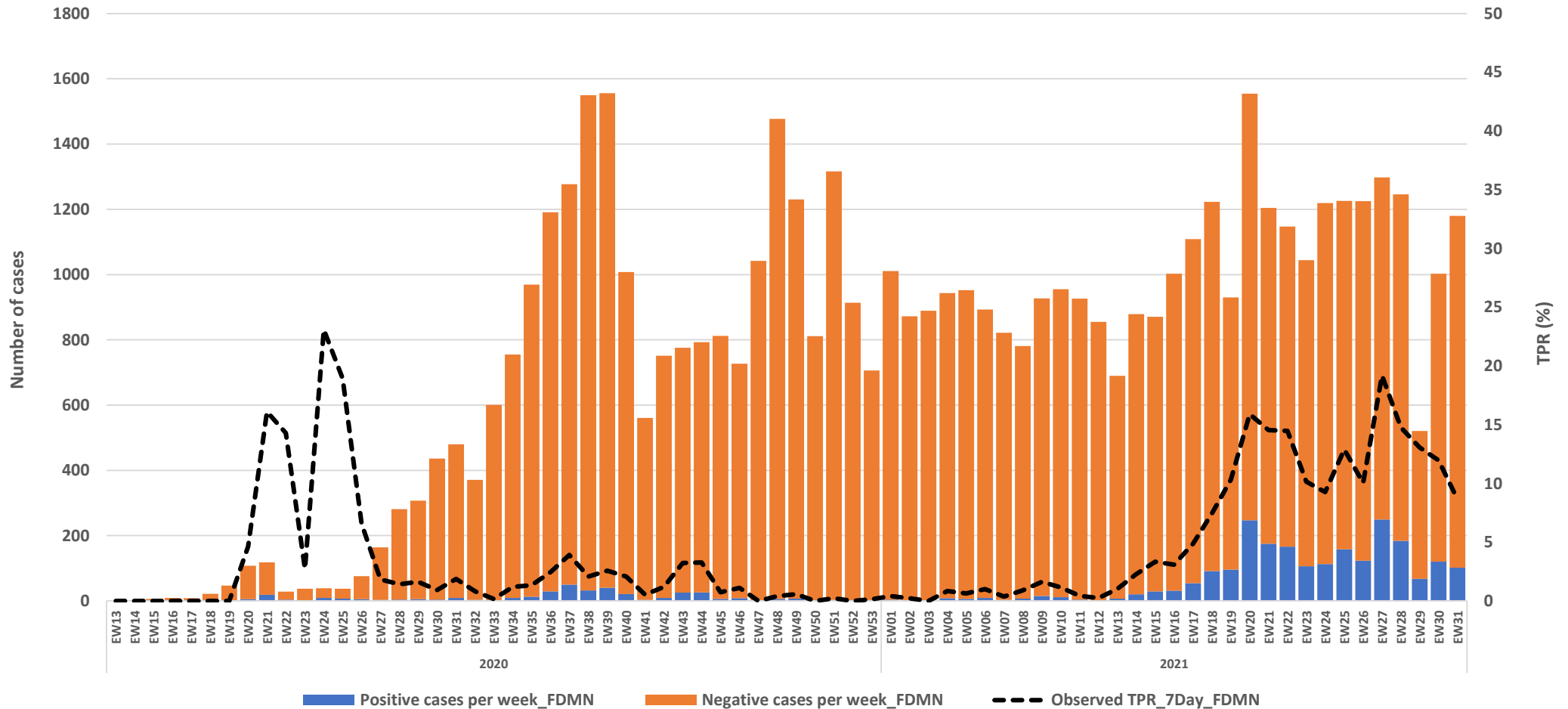
## Highlights: COVID-19

### COVID-19 positive cases (n=2,577) by epidemiological week by date of test



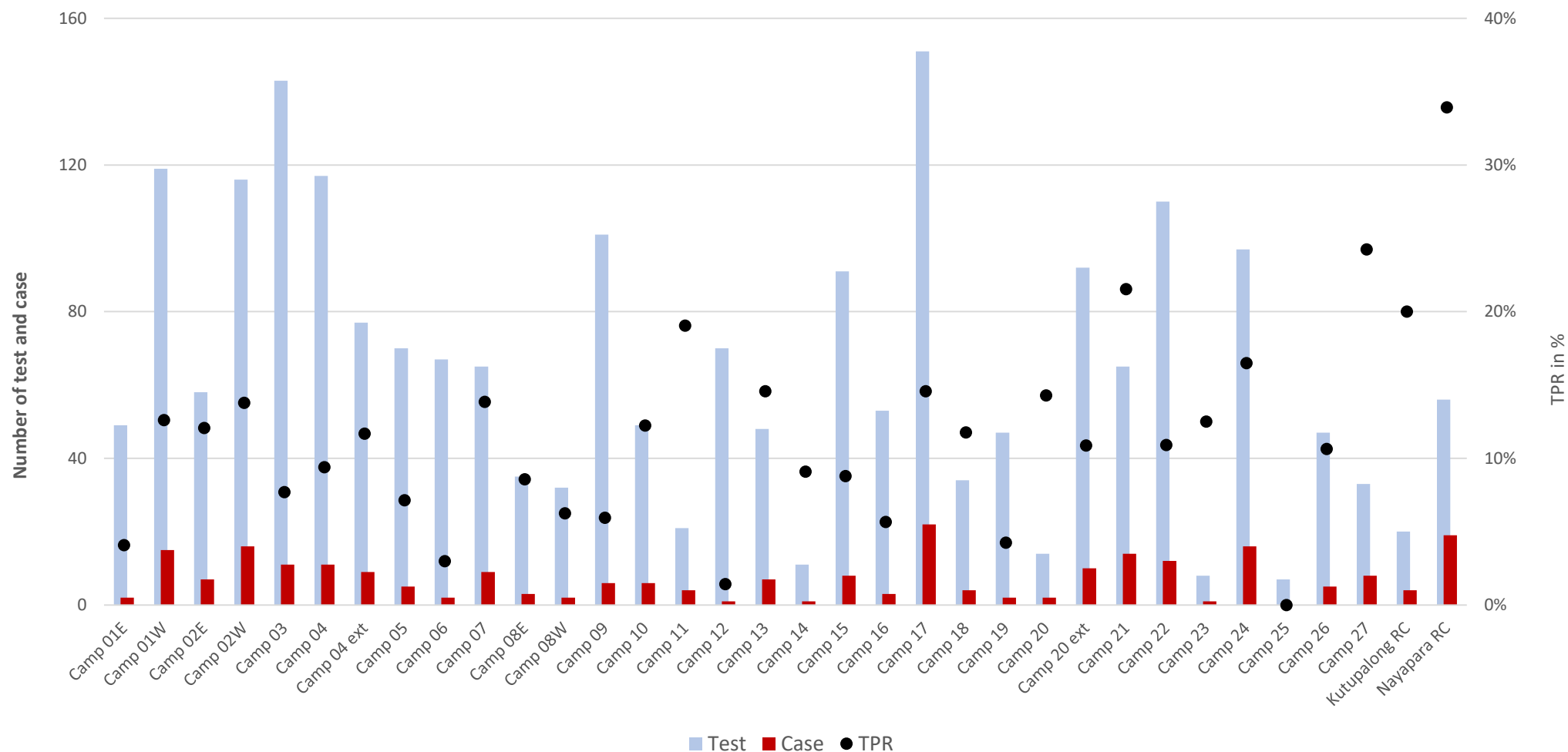
# Highlights: COVID-19

Weekly observed TPR, FDMN/Roingya Refugees, Cox's Bazar

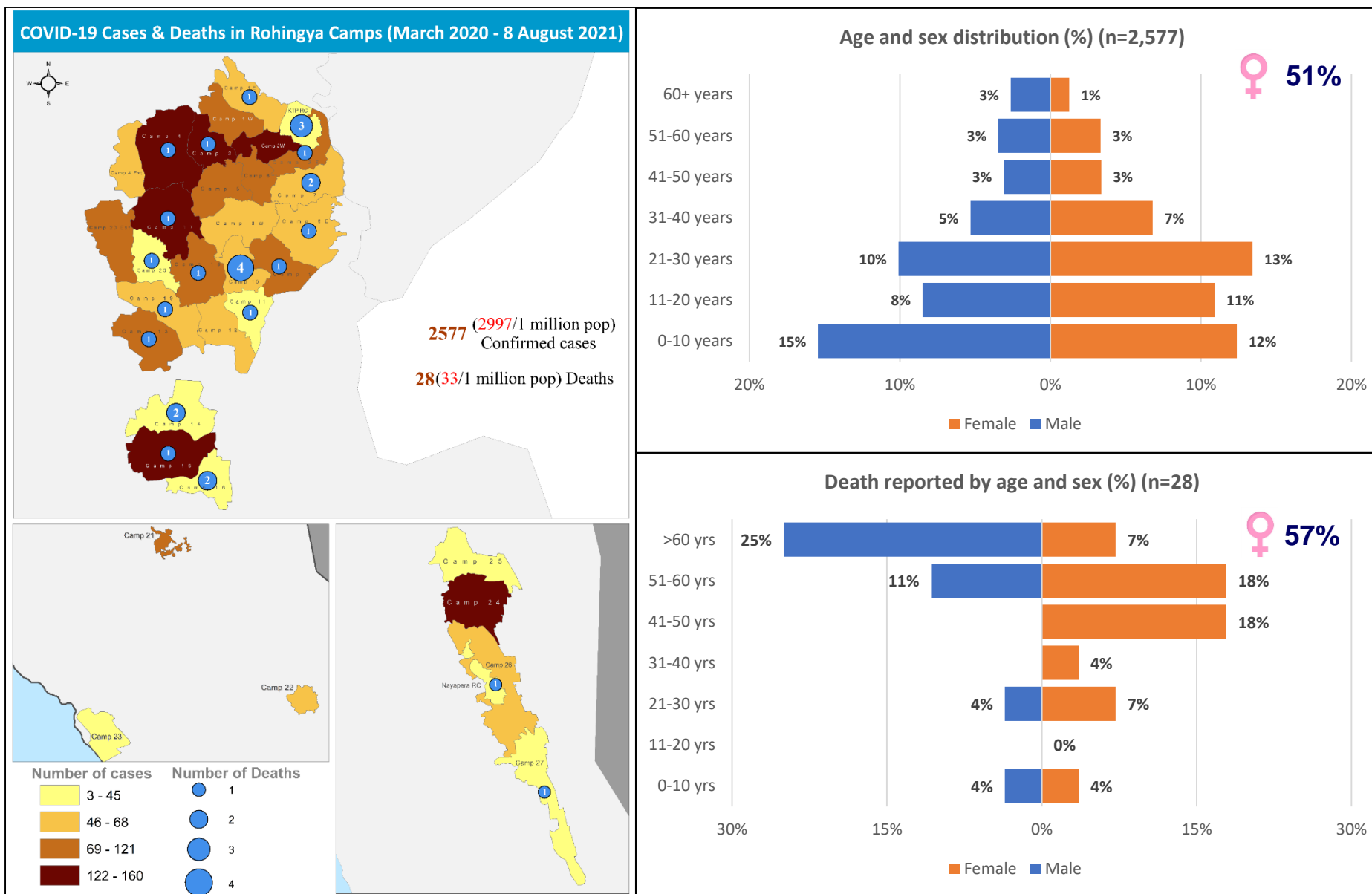


# Highlights: COVID-19

COVID-19 test case and TPR per camp, W30-31

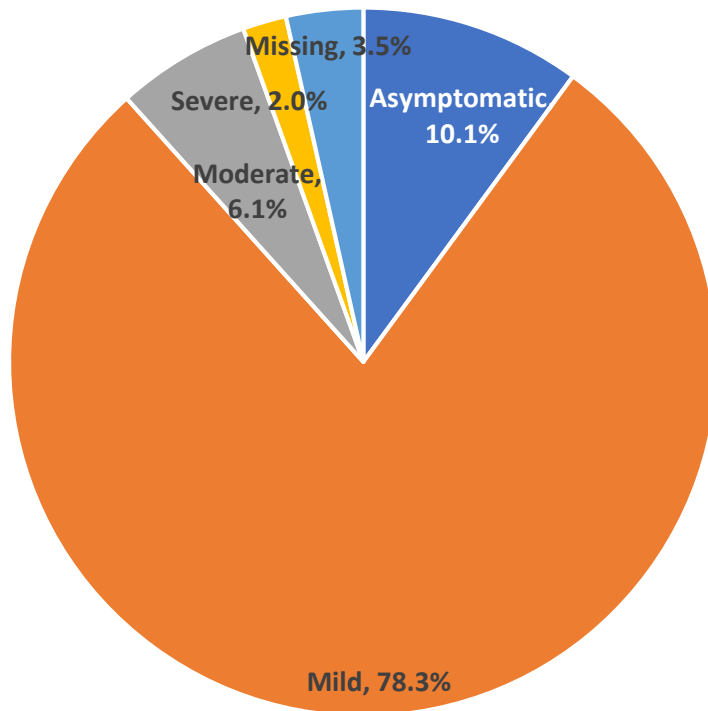


# Highlights: COVID-19

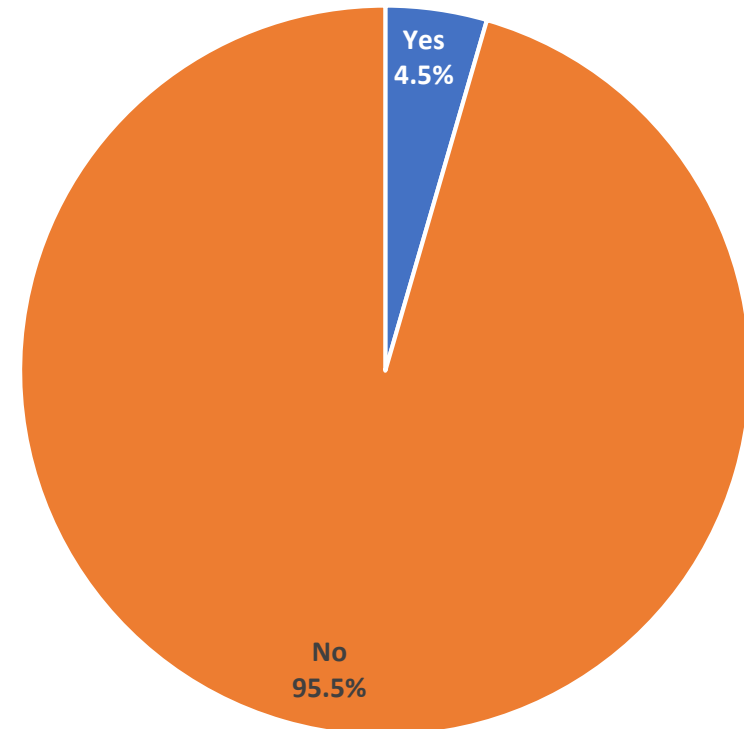


# Highlights: COVID-19

Severity of reported cases at presentation (n=2,361)



Did the case report at least 1 co-morbidity (n=2,361)



Source: Go.Data

# Highlights: COVID-19 Contact Tracing

- Total 2,665 (out of 2,577) confirmed cases have been investigated by Rapid Investigation and Response Team *(RIRT, a camp wise CT network, composed of RIRT coordinator, Site Mx representation, CT supervisor, currently camp 34 teams are working with 34 supervisors and over 300 volunteers i.e., contact tracer).*
- Contact tracing has been done by CT supervisors with 5,281 contacts registered in the Go.Data for follow up, out of 8,704 contact identified through field investigation by RIRT.
- 3,193 (60%) contacts successfully completed the follow up.
- Two hundred and fifty-seven (8.0%) contacts became tested positive for COVID-19 during the incubation period.



# EWARS Reporting Updates

- Total 173 health facilities registered in EWARS
- Only 138/173 weekly reports received on time in week 31
- Seventy-nine (79) alerts were triggered in week 31
- Timeliness of reporting for this week is 80%
- All alerts were reviewed and verified by WHO EWARS team, the number is more than that of previous week (51 in week 30).

# Highlights:

- Acute Respiratory Infection (14.4%), Diarrheal Diseases (5.7%) & Unexplained Fever (1.1%) are the diseases with highest proportional morbidity in week 31.
- Suspected SARI death under enhanced Community-based mortality surveillance has been continued since week 28, 2020.
  - One hundred twenty-five (125) suspected SARI deaths have been reported so far and reviewed subsequently by Rapid Investigation and Response Team (RIRT) for COVID-19.
  - Total eleven (11) SARI deaths were considered as death due to probable COVID-19 till date.

# Diphtheria

One new suspected diphtheria case was reported in go.data in week 31

A total of 9 291 case-patients were reported since 2017 to till date

- Confirmed = 343
- Probable = 2 803
- Suspected = 6 145

Total case reported in 2021 = 105

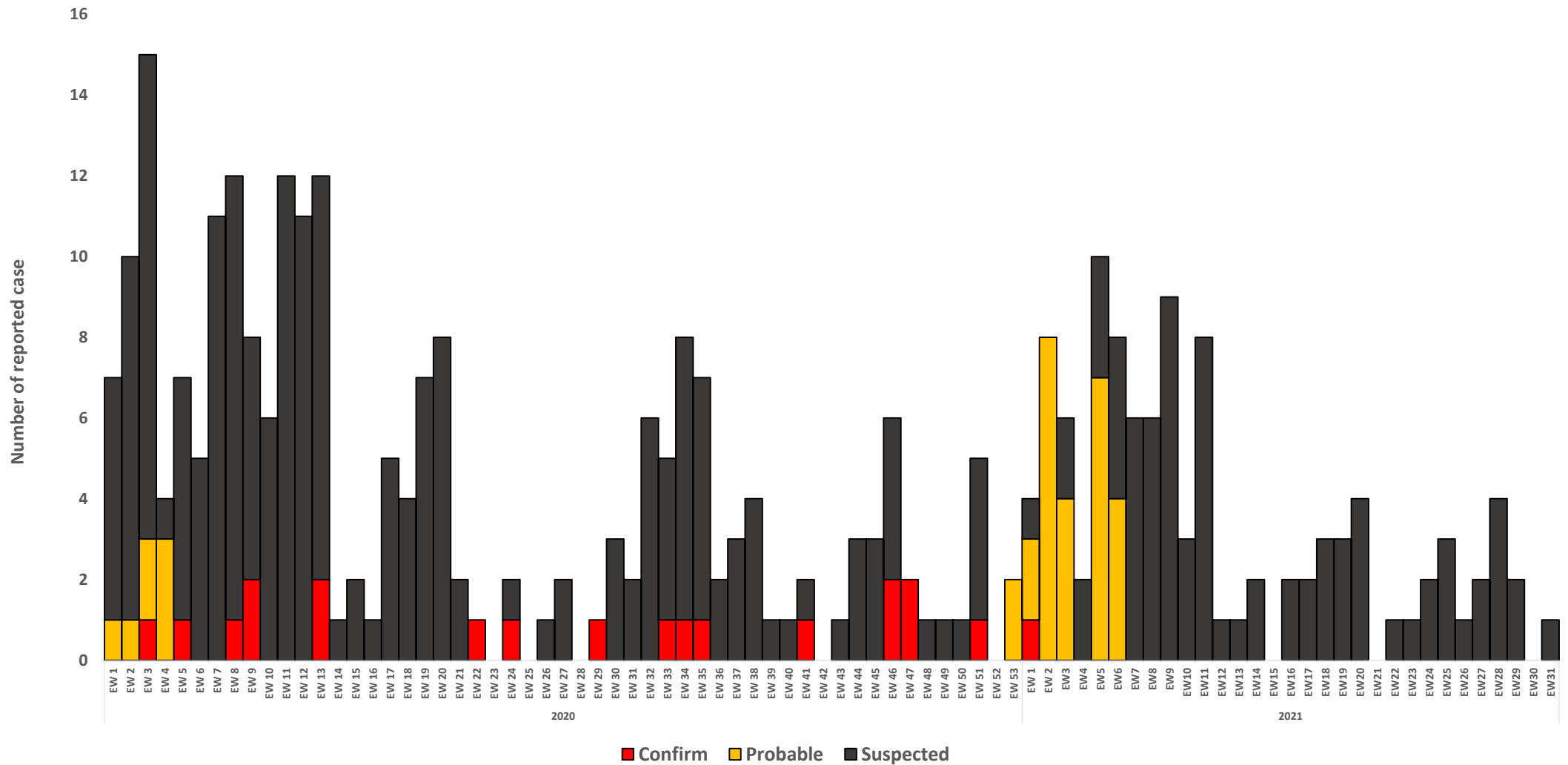
- Confirmed = 1
- Probable = 25
- Suspected = 79

Last confirmed case was reported in week 1 (4 January 2021)

In total 47 deaths were reported, last death reported on 25 October 2019.

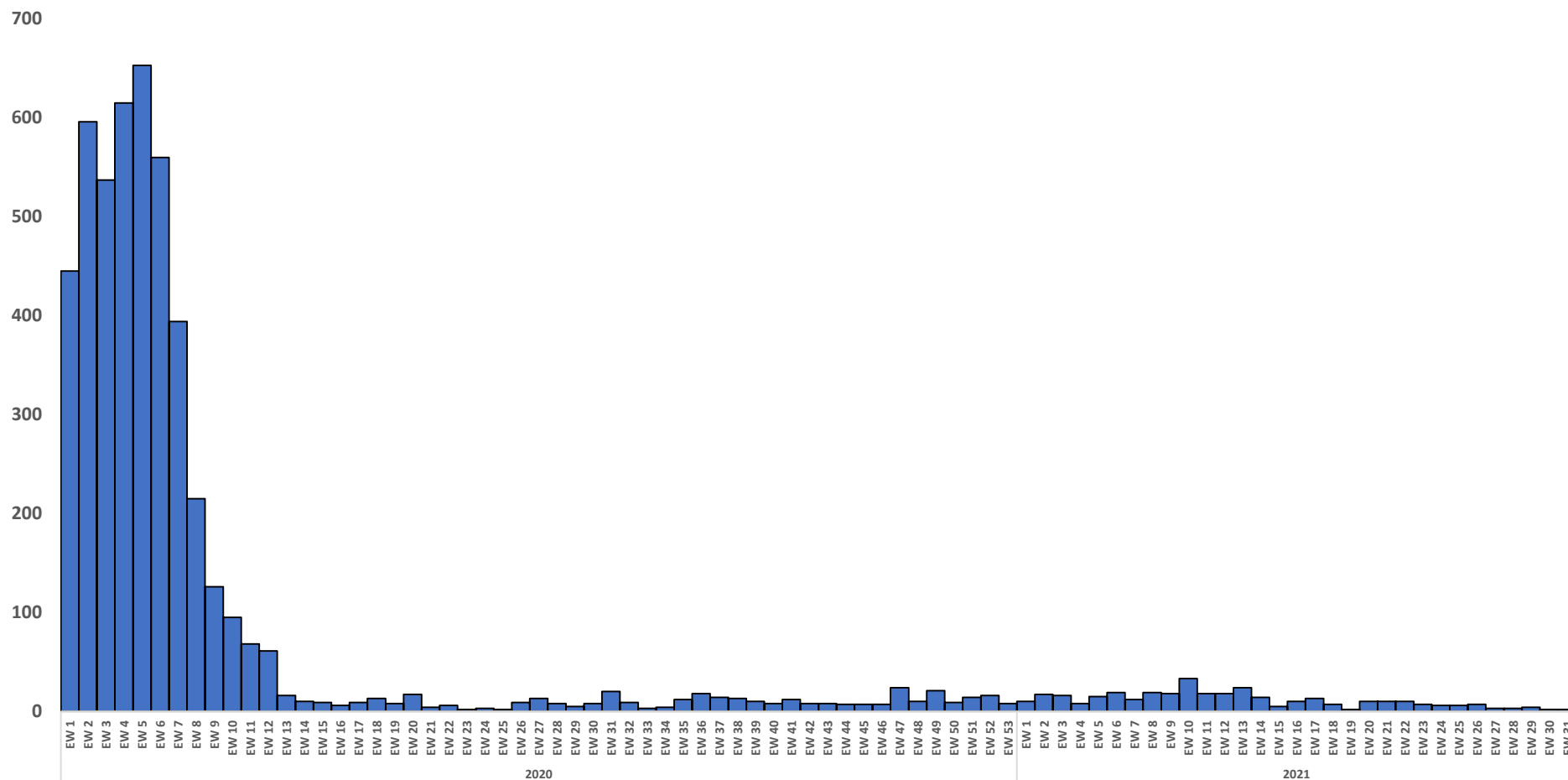
# Diphtheria

Total number of diphtheria case reported in EWARS from 2020-2021 W31



# Measles

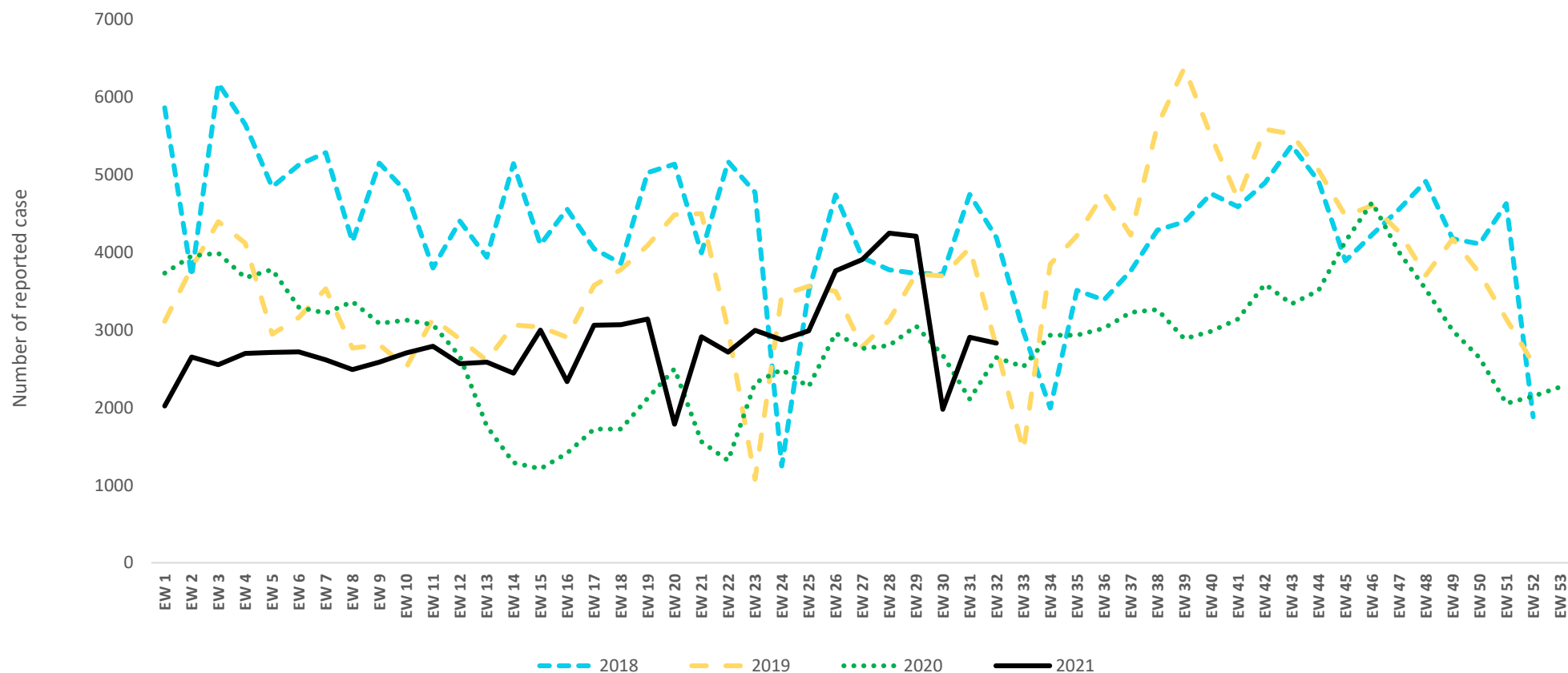
Total number of Measles case reported in EWARS from 2020- 2021 W31



In week 31, 2 suspected measles cases were reported through weekly reporting make 348 cases in total in 2021. Out of those 257 cases (75%) reported through case-based reporting and samples collected for laboratory confirmation.

# Diarrhoeal Disease

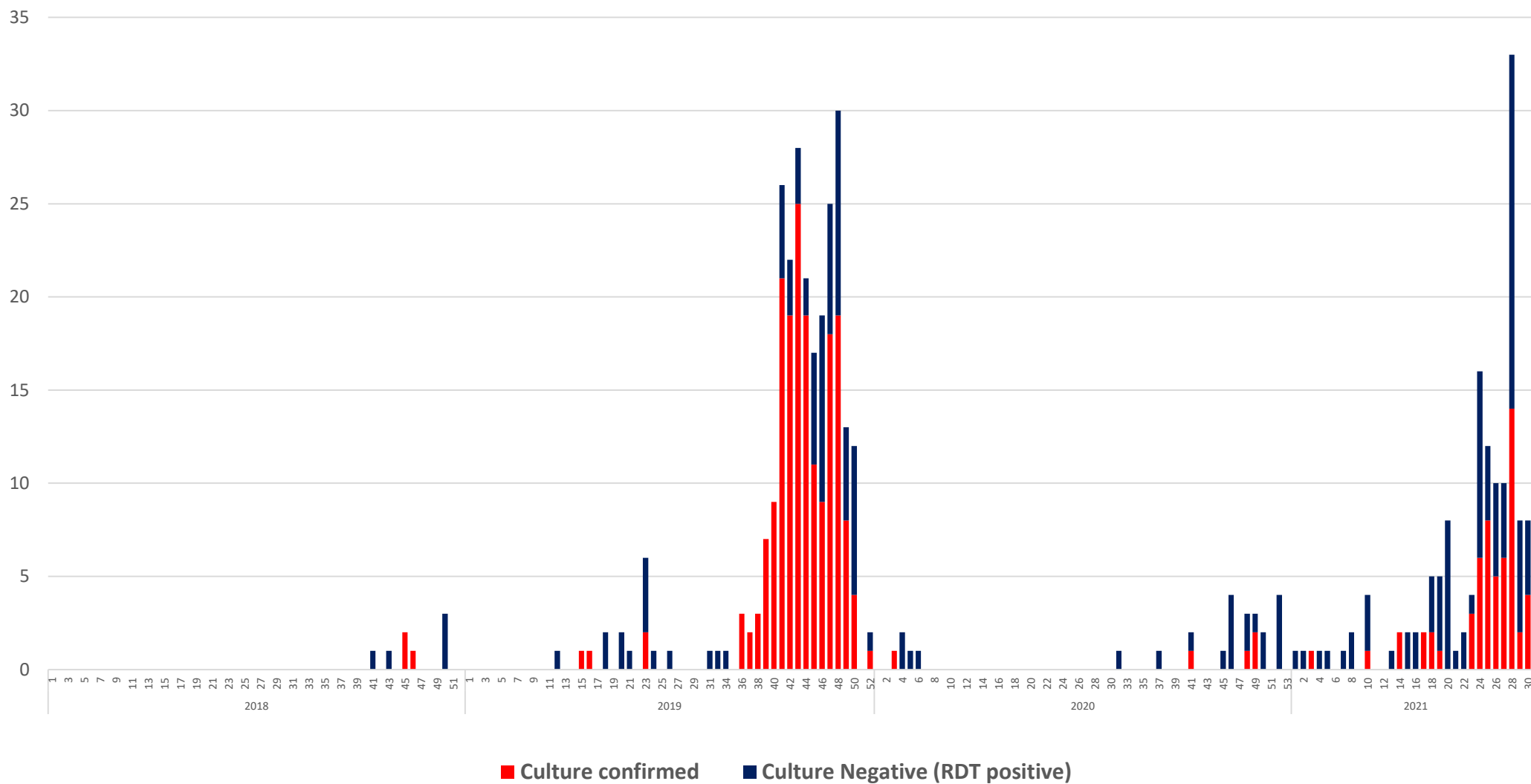
Total number of AWD case reported in EWARS from 2018-2021 W31



- A total of 3,926 cases of diarrhoeal diseases reported in EWARS in week 31.
- Among which 2,733 cases (3.6%) reported as acute watery diarrhoea (AWD), remaining 892 (1.2%) and 301 (0.4%) cases as other and bloody diarrhea, respectively.

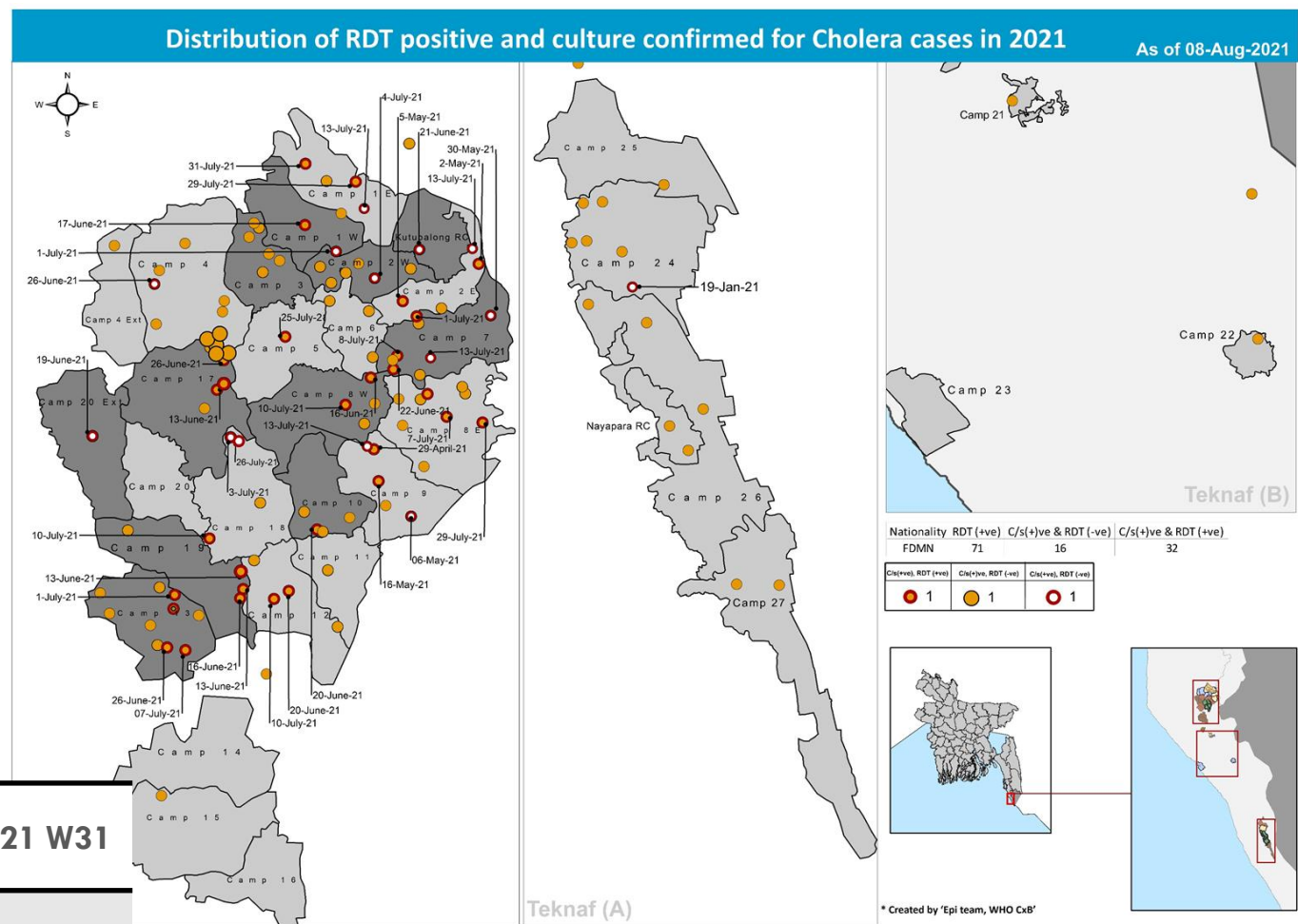
# Cholera Surveillance

RDT positive & culture confirmed cholera cases, 2018-21



# Cholera Surveillance

- Total one hundred fifty-four (154) Cholera RDT positive/culture cases reported as of W31 2021. Out of those 58 were confirmed by culture, 66 discarded and remaining 30 results yet to be received.
- In 2020, total 28 RDT/Culture positive cases for Cholera detected through sentinel testing. Specifically, 5 became confirmed by culture - 2 from Ukhiya Host, 1 from Teknaf host and 2 from Refugees.



2018 2019 2020 2021 W31

RDT positive/culture confirmed for Cholera 49 258 28 154

Culture confirmed for Cholera 7 184 5\* 58

\*3 culture confirmed cases were RDT negative in 2020



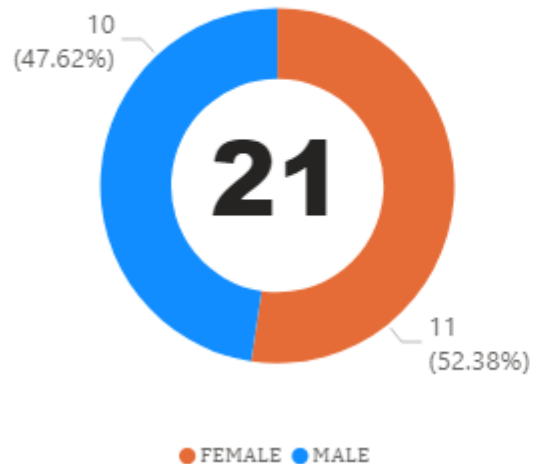
# Community-based Mortality surveillance

In week 31, 21 deaths were recorded -

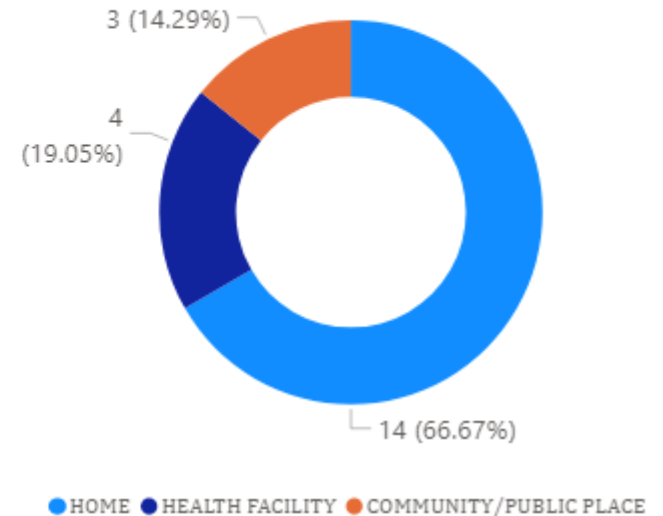
- 71% (n=15) were due to causes classified as “Others”
  - 14% (n=3) as still birth (Born Dead)
  - 10% (n=2) as severe acute respiratory infection (SARI)
  - 5% (n=1) as infectious disease
- 
- Out of reported deaths, 19.0% occurred in health facilities and 66.6% at homes and 14.2% at community/public place.
  - Partners to report all mortalities into EWARS platform using both case and event-based reporting as applicable.

# Community-based Mortality Surveillance

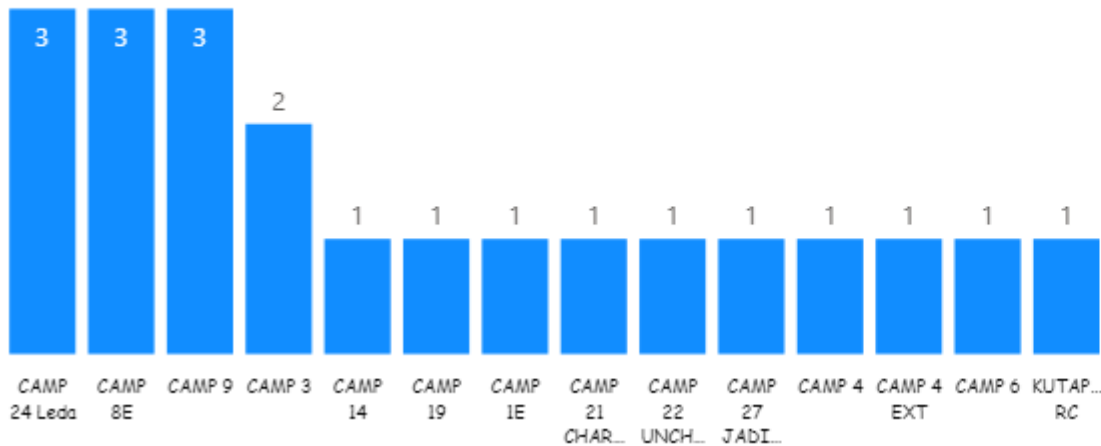
**Gender distribution**



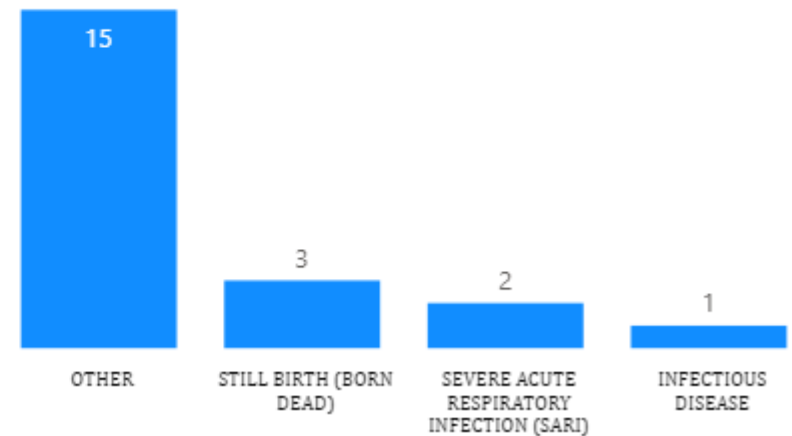
**Place of death**



**Distribution of deceased Camp**



**Distribution of Probable cause of death**



# Bangladesh

Rohingya Emergency Response

Early Warning, Alert and  
Response System (EWARS)

Epidemiological Bulletin W31 2021



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 W31 2021

**Table 1 | Coverage**

#	%	
<b>866,457</b>	-	Estimated total Rohingya population <sup>1</sup>
<b>866,457</b>	<b>100%</b>	Total population under surveillance
<b>175</b>	-	Total number of health facilities
<b>173</b>	<b>99%</b>	Number of EWARS reporting sites

**Table 2 | Early warning performance indicators**

W31	Cumulative (2021)	
<b>138</b>	<b>5001</b>	Number of weekly reports received
<b>80%</b>	<b>90%</b>	Completeness
<b>80%</b>	<b>84%</b>	Timeliness

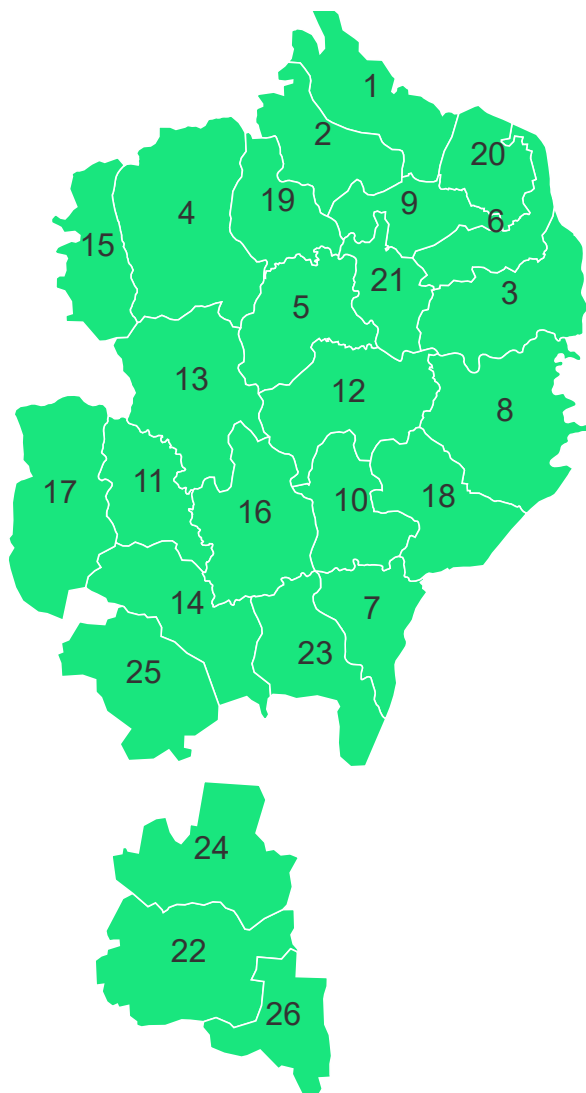
**Table 3 Alert performance indicators**

W31	Cumulative (2021)	
<b>79</b>	<b>2,038</b>	Total alerts raised
<b>100%</b>	<b>100%</b>	% verified
<b>0%</b>	<b>0%</b>	% auto-discarded
<b>0%</b>	<b>1%</b>	% undergoing risk assessment
<b>0%</b>	<b>1%</b>	% completed risk assessment

<sup>1</sup> Source: UNHCR. Bangladesh: Joint Government of Bangladesh- UNHCR Population Factsheet. 31 December 2020.

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

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

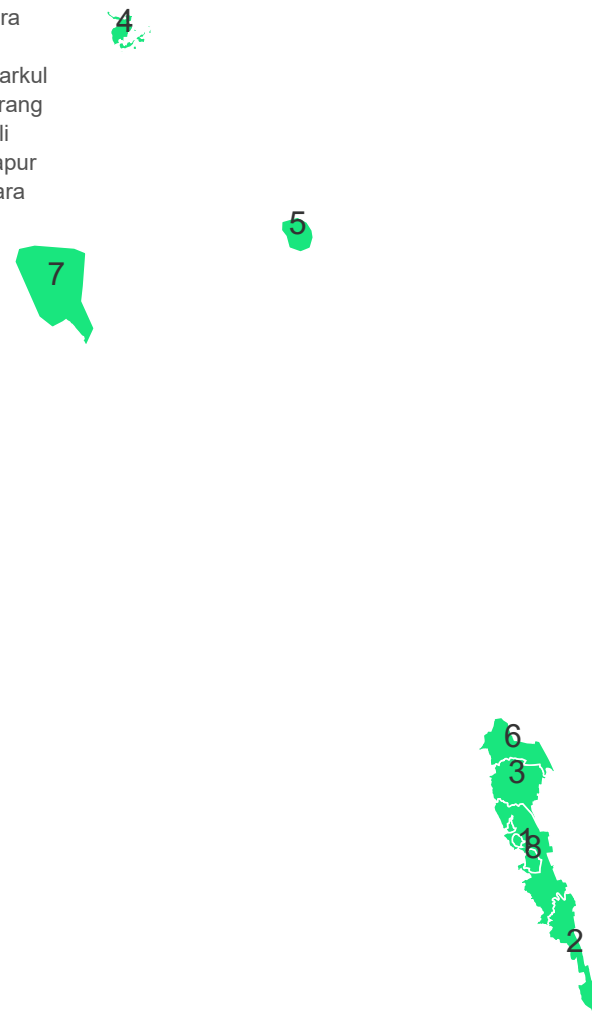


Completeness

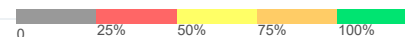


**Map 1b | Teknaf completeness by camp**

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



Completeness

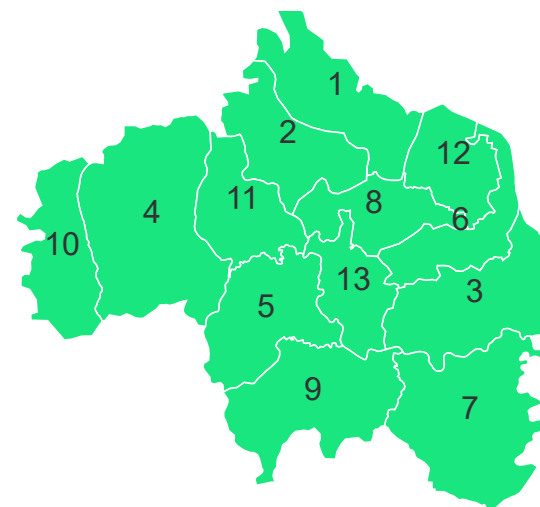


**Table 4 | Performance by camp (W31 2021)**

Northern group	Reporting		Performance	
	# health facilities	# reports received	Completeness	Timeliness
Ukhia Northern Group				
Camp 1E	4	4	100%	100%
Camp 1W	4	1	25%	25%
Camp 2E	3	2	67%	67%
Camp 2W	4	3	75%	75%
Camp 3	6	5	83%	83%
Camp 4	6	5	83%	83%
Camp 4 Ext	1	1	100%	100%
Camp 5	5	5	100%	100%
Camp 6	3	2	67%	67%
Camp 7	5	3	60%	60%
Camp 8E	8	7	88%	88%
Camp 8W	4	4	100%	100%
Kutupalong RC	2	2	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 Camp 2W
- 9 Camp 8W
- 10 Camp 4 Ext
- 11 Camp 3
- 12 Kutupalong RC
- 13 Camp 6



Completeness

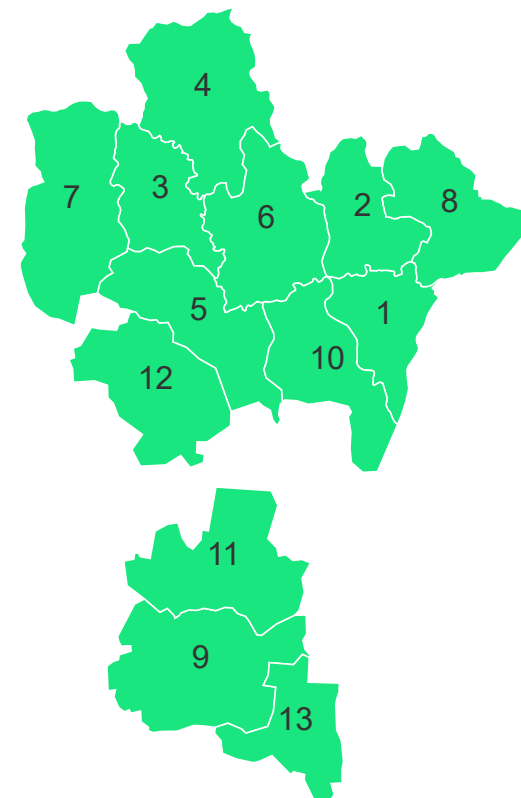


**Table 5 | Performance by camp (W31 2021)**

Southern group	Reporting		Performance	
	# health facilities	# reports received	Completeness	Timeliness
Ukhia Southern Group				
Camp 10	4	4	100%	100%
Camp 11	9	9	100%	100%
Camp 12	6	5	83%	83%
Camp 13	9	6	67%	67%
Camp 14	7	5	71%	71%
Camp 15	9	6	67%	67%
Camp 16	6	5	83%	83%
Camp 17	5	4	80%	80%
Camp 18	5	5	100%	100%
Camp 19	6	6	100%	100%
Camp 20	3	3	100%	100%
Camp 20 Ext	2	2	100%	100%
Camp 9	6	4	67%	67%

**Map 3 | Completeness by camp**

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



Completeness



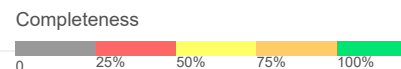
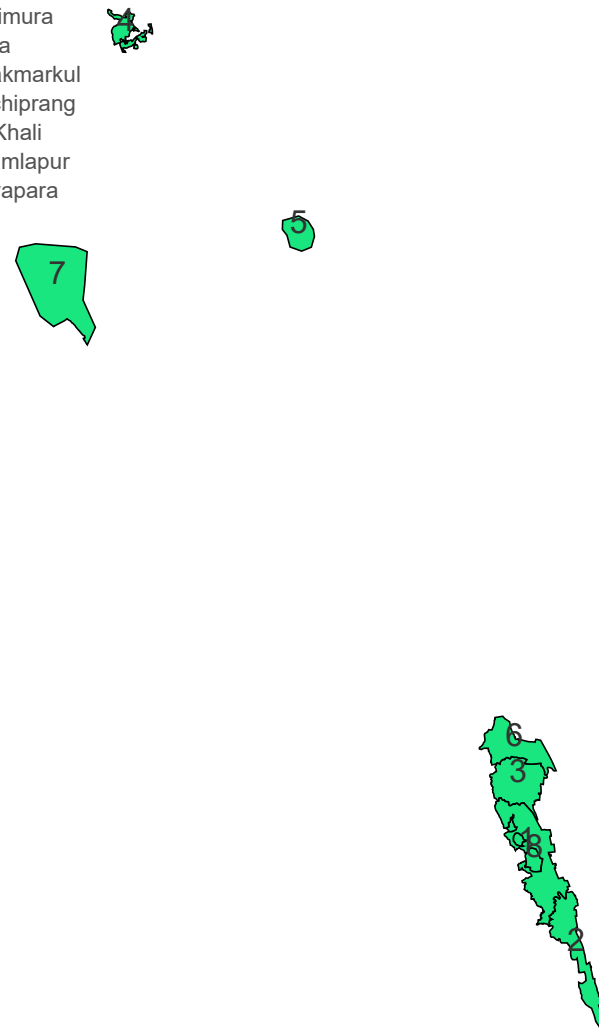


**Table 6** | Performance by camp (W31 2021)

Teknaf	Reporting		Performance	
	# health facilities	# reports received	Completeness	Timeliness
Ukhia Teknaf				
Camp 21 Chakmarkul	4	4	100%	100%
Camp 22 Unchiprang	4	3	75%	75%
Camp 23 Shamlapur	3	2	67%	67%
Camp 24 Leda	1	1	100%	100%
Camp 25 Ali Khali	3	3	100%	100%
Camp 26 Nayapara	4	3	75%	75%
Camp 27 Jadimura	3	2	67%	67%
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 22 Unchiprang
- 6 Camp 25 Ali Khali
- 7 Camp 23 Shamlapur
- 8 Camp 26 Nayapara



**Table 7** | Performance by partner (W31 2021)

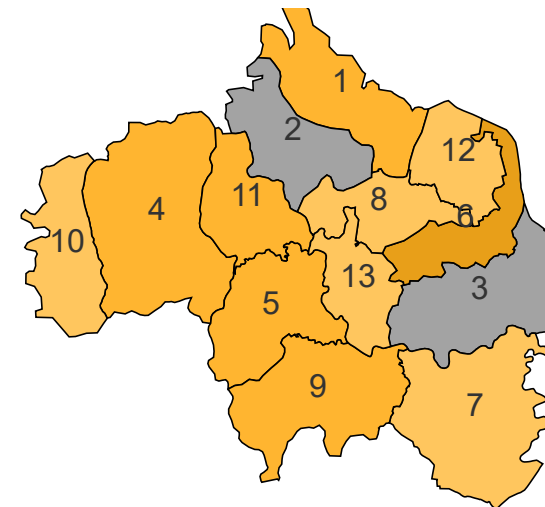
Partner	Performance		Reporting		Partner	Performance		Reporting	
	# sites	# reports received	Completeness	Timeliness		# sites	# reports received	Completeness	Timeliness
AKF	1	0	0%	0%	IRC	2	2	100%	100%
AWARD	7	7	100%	100%	MSF	9	3	33%	33%
BASHMAH	1	0	0%	0%	MoH	21	14	67%	67%
BDRCS	11	8	73%	73%	MHI	2	0	0%	0%
BRAC	11	11	100%	100%	Medair	2	2	100%	100%
CARE	4	4	100%	100%	FH/MTI	3	3	100%	100%
DAM	2	2	100%	100%	PRANTIC	1	1	100%	100%
DBC	1	1	100%	100%	PULSE	1	0	0%	0%
DSK	1	0	0%	0%	QC	1	1	100%	100%
DCHT	2	2	100%	100%	PHD	10	10	100%	100%
FRNDS	10	9	90%	90%	RPN	2	2	100%	100%
GK	10	8	80%	80%	RHU	3	3	100%	100%
Global One	1	0	0%	0%	RI	3	3	100%	100%
GUSS	1	1	100%	100%	RTMI	9	6	67%	67%
HAEFA	2	2	100%	100%	SALT	1	1	100%	100%
HAIB	8	8	100%	100%	SCI	7	7	100%	100%
HMBDF	2	2	100%	100%	SHED	0	0		
HOPE	1	1	100%	100%	Turkish Government	1	0	0%	0%
ICRC	2	1	50%	50%	TdH	2	2	100%	100%
IOM	15	11	73%	73%					

Table 8 | Performance by camp

Northern group	W31		Cumulative (2021)	
	# alerts	% verif.	# alerts	% verif.
Alerts Northern group				
Camp 1E	5	100%	48	100%
Camp 1W	0	0%	56	100%
Camp 2E	7	100%	196	99%
Camp 2W	2	100%	48	100%
Camp 3	5	100%	93	100%
Camp 4	4	100%	106	100%
Camp 4 Ext	1	100%	19	100%
Camp 5	4	100%	90	100%
Camp 6	2	100%	48	100%
Camp 7	0	0%	21	100%
Camp 8E	2	100%	27	100%
Camp 8W	4	100%	107	100%
Kutupalong RC	1	100%	19	100%

Map 5 | Number of alerts by camp

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



# of alerts

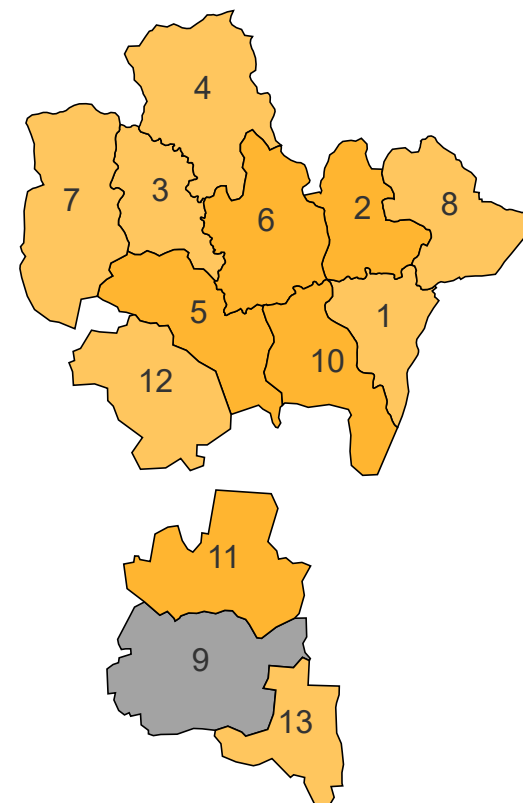


Table 9 | Performance by camp

Southern group	W31		Cumulative (2021)	
	# alerts	% verif.	# alerts	% verif.
Alerts Northern group				
Camp 10	4	100%	66	100%
Camp 11	1	100%	73	100%
Camp 12	3	100%	68	100%
Camp 13	2	100%	83	100%
Camp 14	3	100%	58	100%
Camp 15	0	0%	74	100%
Camp 16	2	100%	83	100%
Camp 17	1	100%	54	100%
Camp 18	3	100%	102	100%
Camp 19	3	100%	51	100%
Camp 20	1	100%	43	100%
Camp 20 Ext	2	100%	31	100%
Camp 9	1	100%	80	100%

Map 6 | Number of alerts by camp

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



# of alerts



Table 10 | Performance by camp

Teknaf	W31		Cumulative (2021)	
	# alerts	% verif.	# alerts	% verif.
Alerts Northern group				
Camp 21 Chakmarkul	2	100%	19	100%
Camp 22 Unchiprang	3	100%	48	100%
Camp 23 Shamlapur	0	0%	16	100%
Camp 24 Leda	3	100%	43	100%
Camp 25 Ali Khali	2	100%	19	100%
Camp 26 Nayapara	2	100%	74	100%
Camp 27 Jadimura	0	0%	10	100%
Nayapara RC	1	100%	30	100%

Map 7 | Number of alerts by camp

- 1

Nayapara RC
- 2

Camp 27 Jadimura
- 3

Camp 24 Leda
- 4

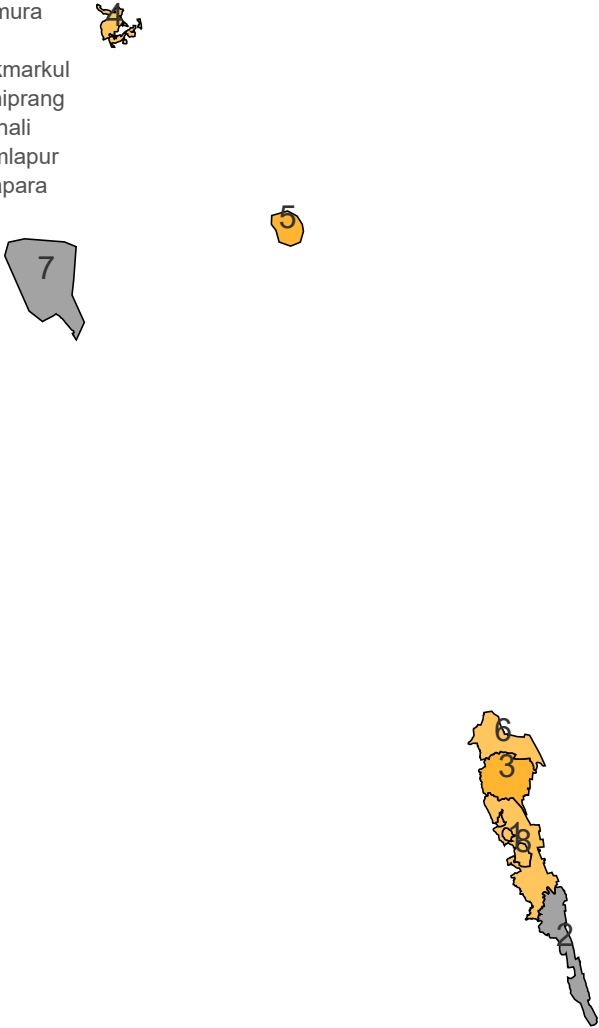
Camp 21 Chakmarkul
- 5

Camp 22 Unchiprang
- 6

Camp 25 Ali Khali
- 7

Camp 23 Shamlapur
- 8

Camp 26 Nayapara



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

Event	W31		Cumulative (2021)	
	# alerts	% verif.	# alerts	% verif.
<b>Indicator-based surveillance</b>				
Malaria	0	0%	4	100%
Measles	5	100%	245	100%
Bloody Diarr.	0	0%	0	0%
AFP	1	100%	9	100%
Meningitis	0	0%	24	100%
Haem. fever (susp.)	0	0%	8	100%
NNT	0	0%	1	100%
Unexp. fever	6	100%	89	100%
AWD	12	100%	192	100%
ARI	20	100%	164	100%
AJS	1	100%	30	100%
Varicella (Susp.)	1	100%	31	100%
Suspected COVID-19	0	0%	0	0%
<b>Event-based surveillance</b>				
EBS total	4	100%	132	100%

**Table 12** | Risk assessment

W31	Cumulative (2021)	
0	18	Low risk
0	2	Moderate risk
0	1	High risk
0	0	Very high risk

## 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>



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 W31 2021



Ministry of Health and Family  
Welfare Bangladesh



World Health  
Organization



HEALTH SECTOR  
COX'S BAZAR

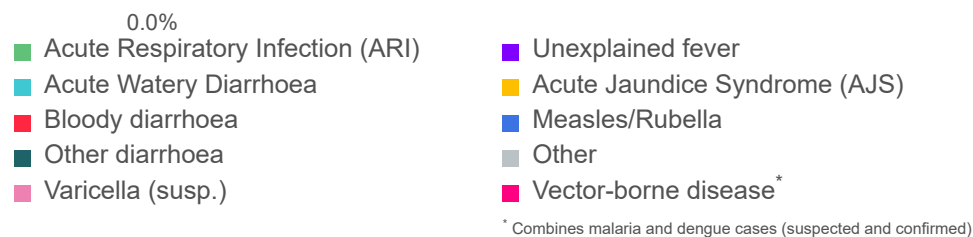


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# Proportional morbidity

**Figure 1 | Proportional morbidity (W31 2021)**



Disease	W31		2021	
	# cases	% morbidity	# cases	% morbidity
AWD	2,733	3.6%	90,851	3.5%
Bloody diarr.	301	0.4%	11,052	0.4%
Other diarr.	892	1.2%	29,948	1.2%
Susp. Varicella	73	0.1%	3,467	0.1%
ARI	10,896	14.4%	448,010	17.4%
Measles/Rub.	6	0.0%	369	0.0%
AFP	2	0.0%	9	0.0%
Susp. menin.	1	0.0%	84	0.0%
AJS	11	0.0%	324	0.0%
Susp. HF	0	0.0%	14	0.0%
Neo. tetanus	0	0.0%	0	0.0%
Adult tetanus	0	0.0%	12	0.0%
Malaria (conf.)	0	0.0%	16	0.0%
Malaria (susp.)	578	0.8%	21,801	0.8%
Dengue (conf.)	0	0.0%	3	0.0%
Dengue (susp.)	0	0.0%	29	0.0%
Unexpl. fever	854	1.1%	28,865	1.1%
Sev. Malnut.	25	0.0%	1,023	0.0%
Inj./Wounds	1,818	2.4%	68,908	2.7%
Other	57,229	75.8%	1,870,837	72.6%
<b>Total</b>	<b>74,614</b>	<b>100%</b>	<b>2,577,053</b>	<b>100%</b>

## Trend in consultations and key diseases

**Figure 2** | Trend in proportional morbidity for key diseases (W31)

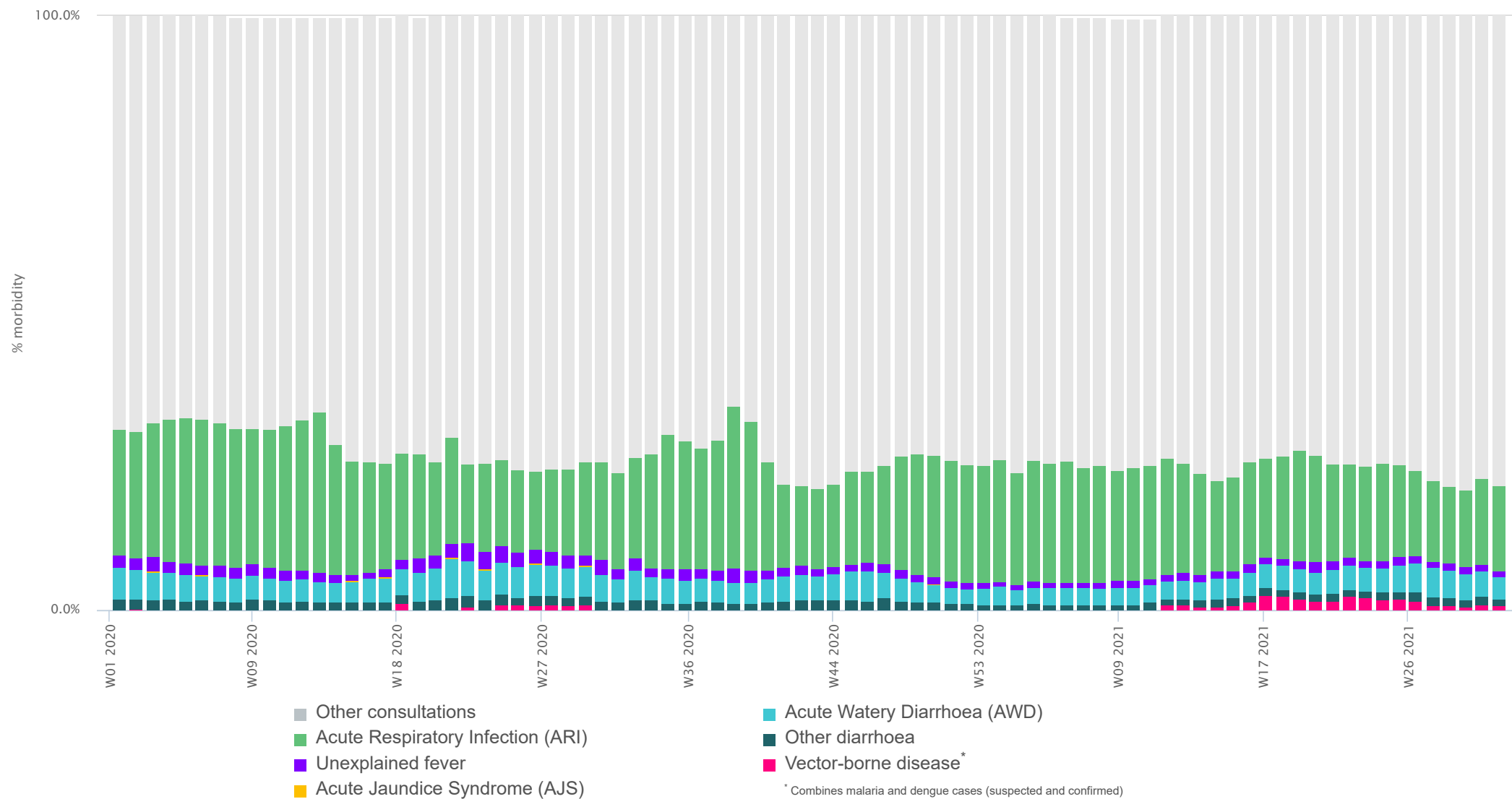
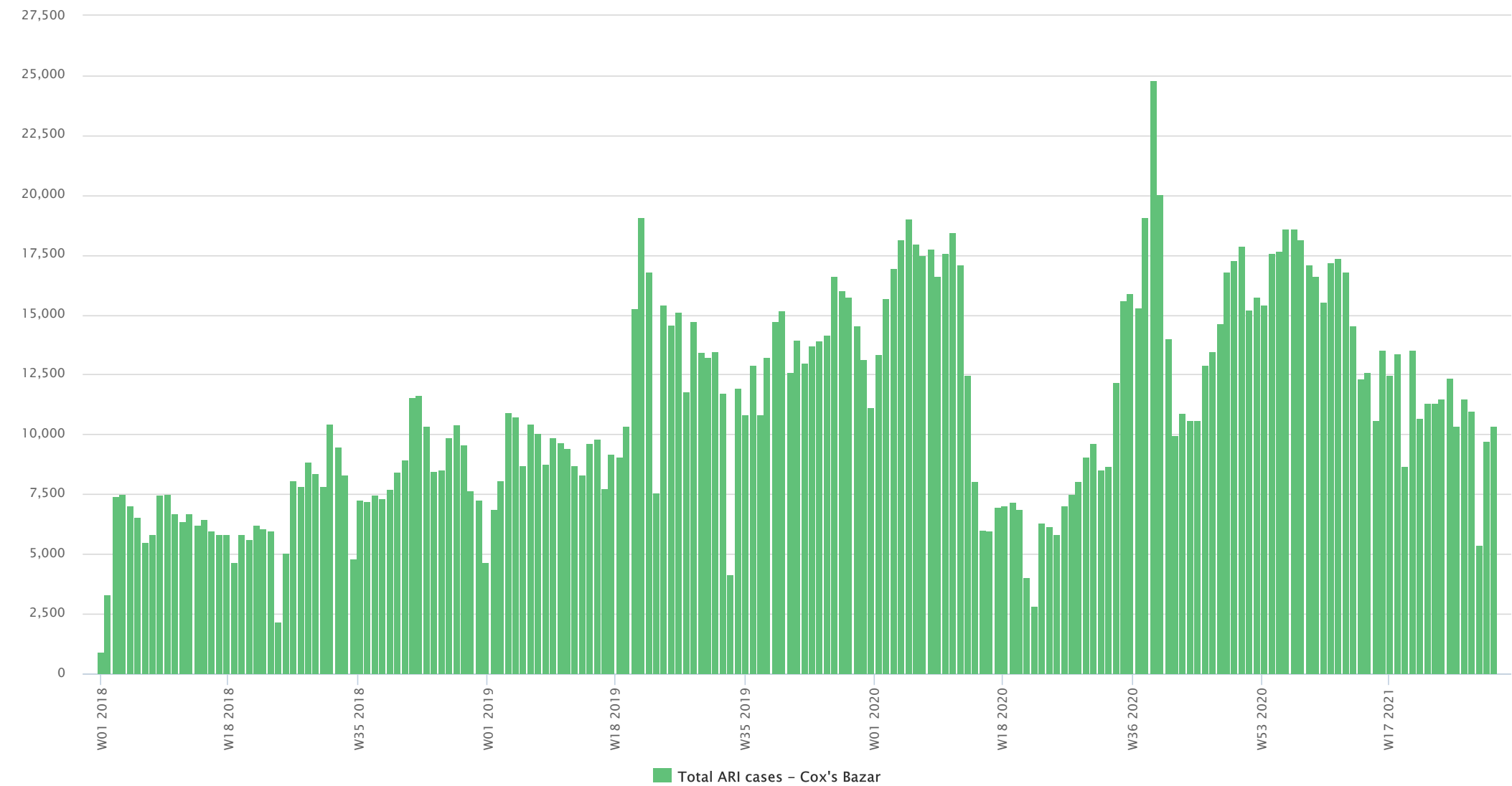
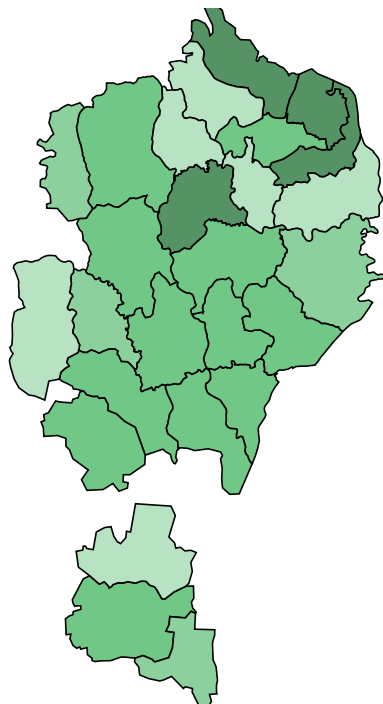


Figure 3 | Trend in number of cases over time (W38 2017 - W31 2021)

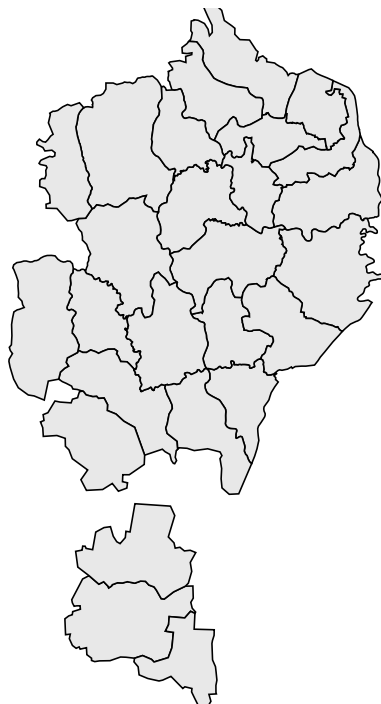


**Map 1** | Map of cases by camp (W31 2021)

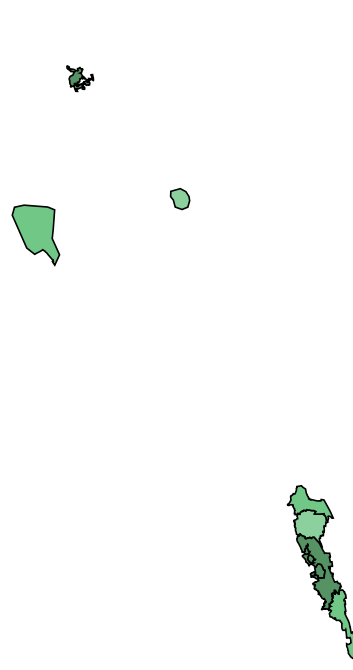
**a. Ukhia** | Number of cases



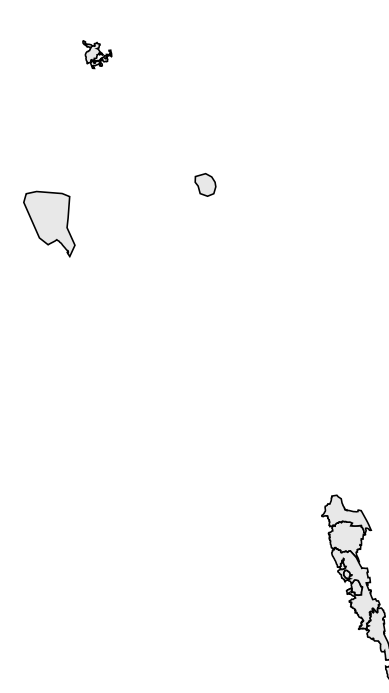
**b. Ukhia** | Number of alerts



**c. Teknaf** | Number of cases



**d. Teknaf** | Number of alerts



## Map legend

Number of cases



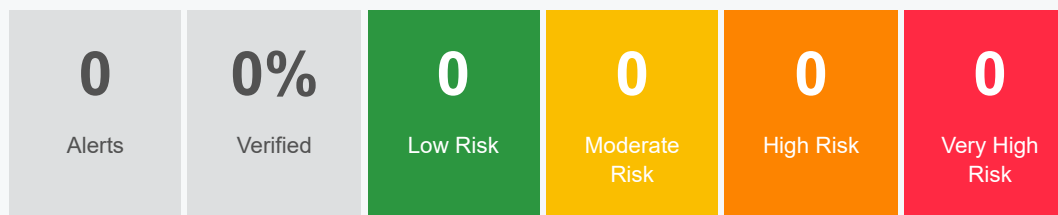
Number of alerts



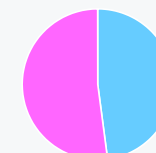
## Alert threshold

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

## Alert management (W31 2021)

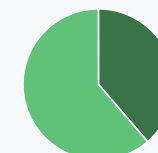


## Figure | % sex



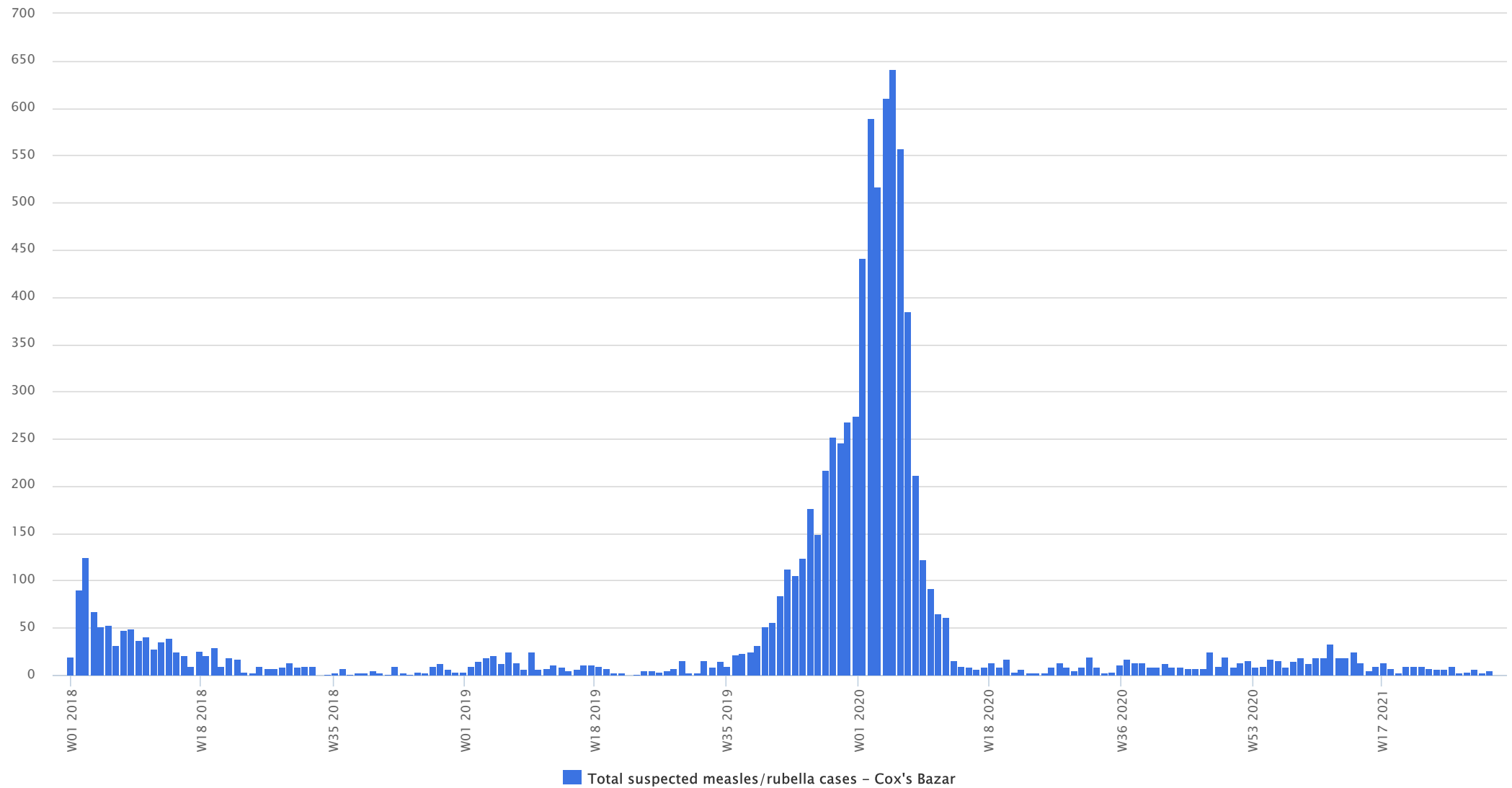
Male Female

## Figure | % age



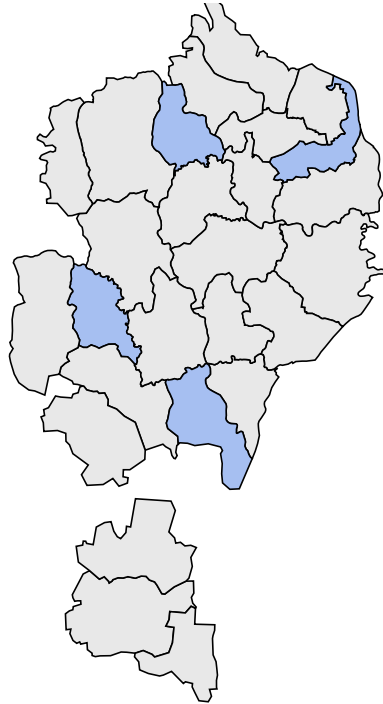
>=5 <5

**Figure 4 |** Trend in number of suspected cases over time (W38 2017 - W31 2021)

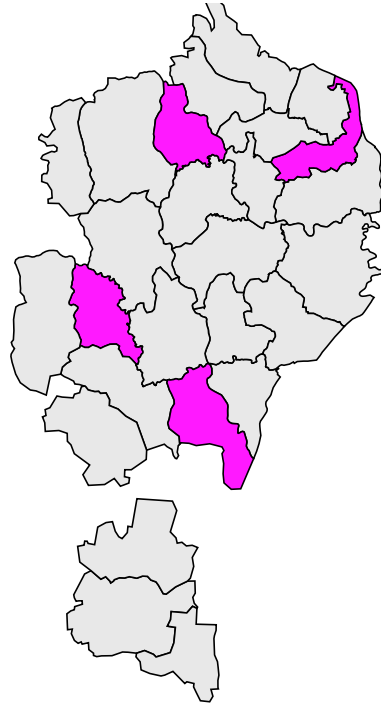


**Map 2 | Map of cases by camp (W31 2021)**

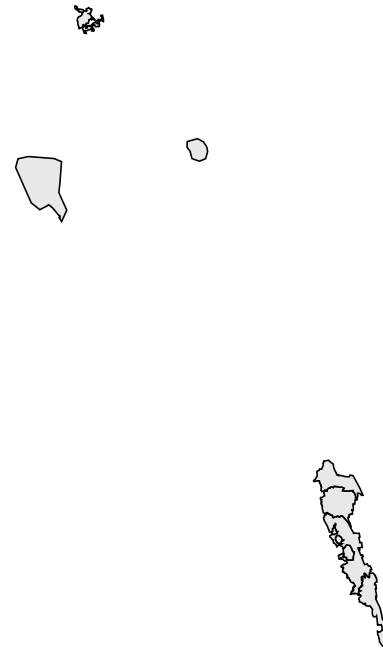
**a. Ukhia | Number of cases**



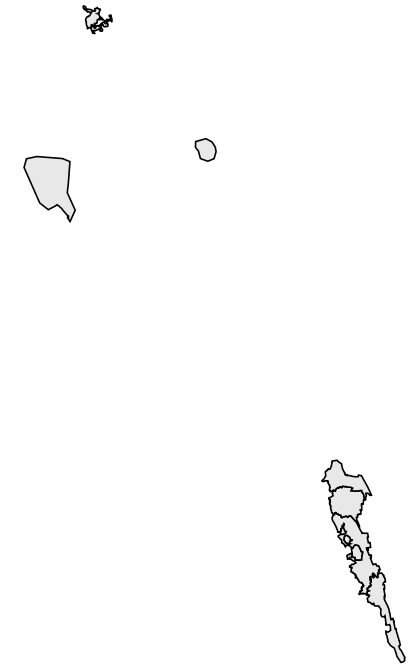
**b. Ukhia | Number of alerts**



**c. Teknaf | Number of cases**

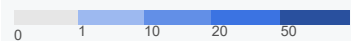


**d. Teknaf | Number of alerts**



## Map legend

Number of cases



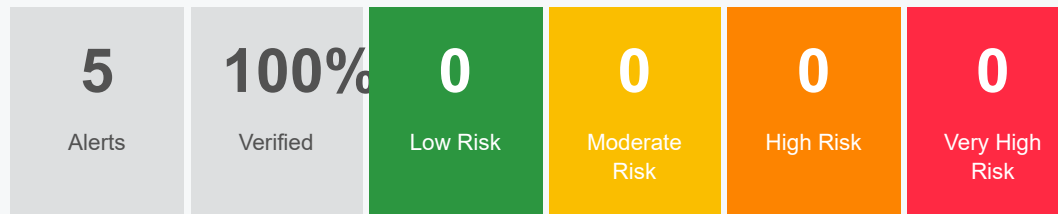
Number of alerts



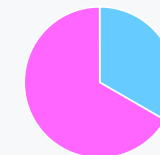
## Alert threshold

1 case. Source: IEDCR

## Alert management (W31 2021)



## Figure | % sex



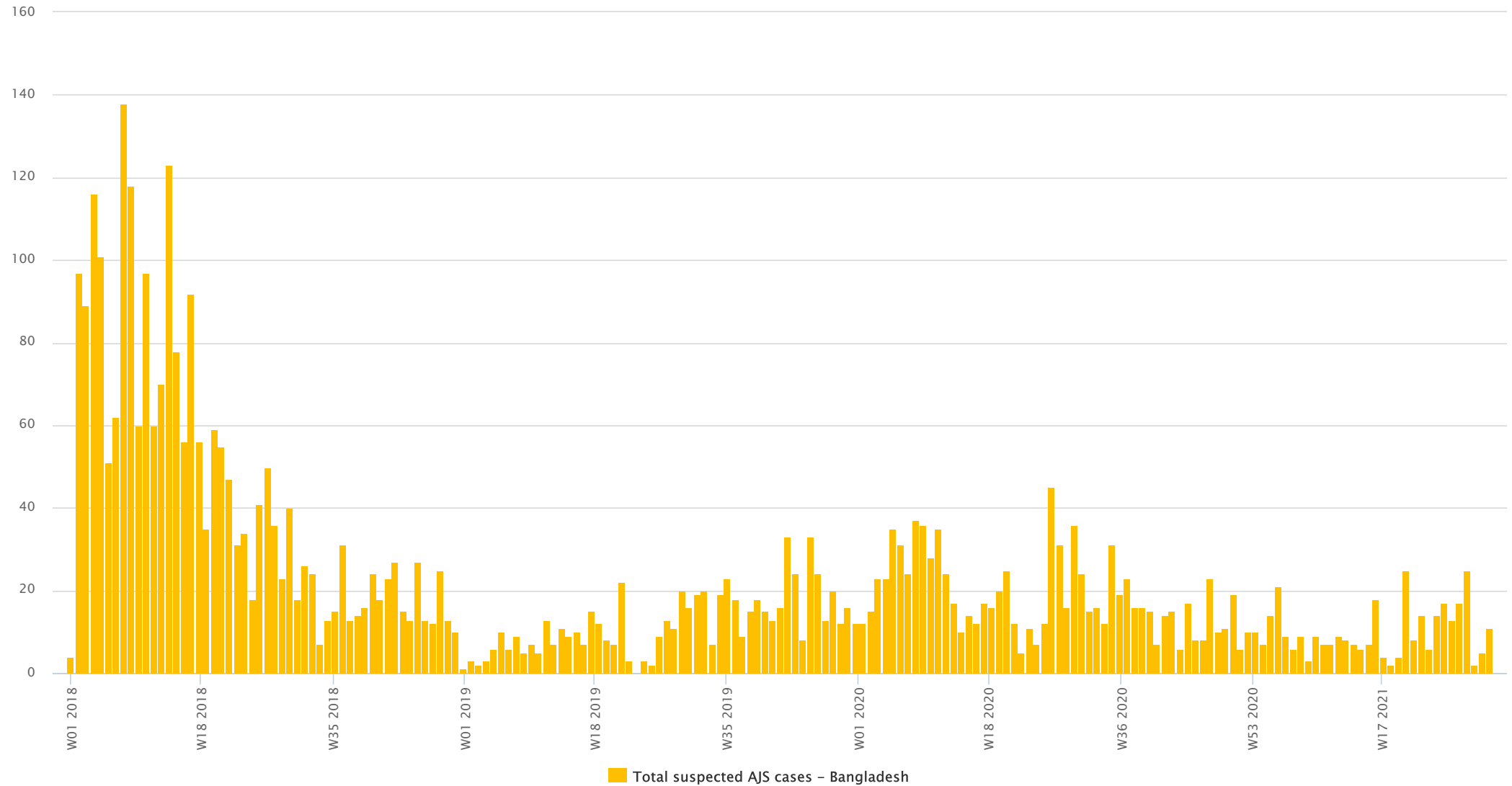
Male Female

## Figure | % age



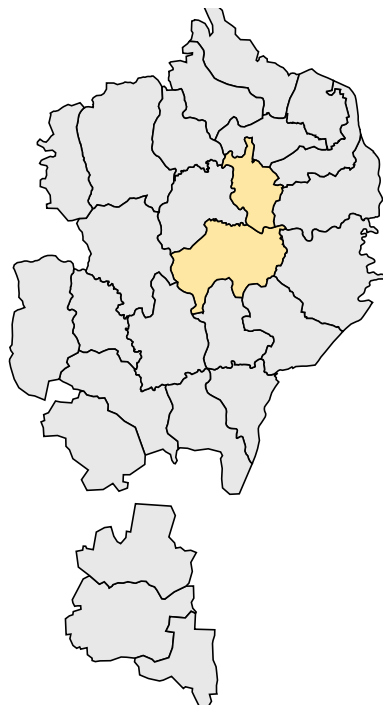
< 5

**Figure 5** | Trend in number of cases over time (W38 2017 - W31 2021)

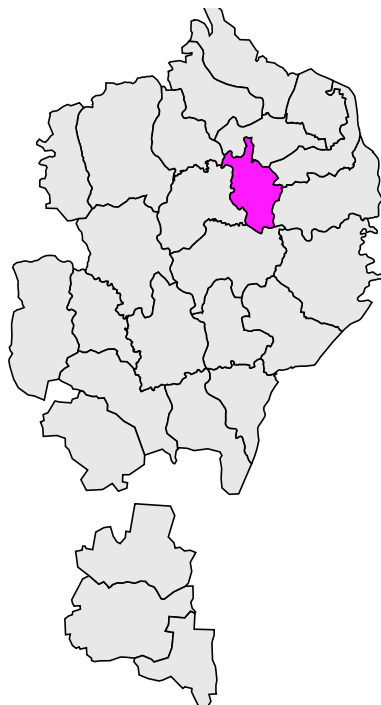


**Map 3 | Map of cases by camp (W37 2017 - W31 2021)**

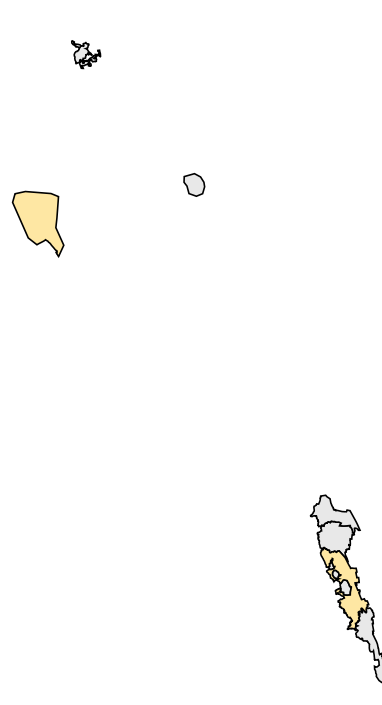
**a. Ukhia | Number of cases**



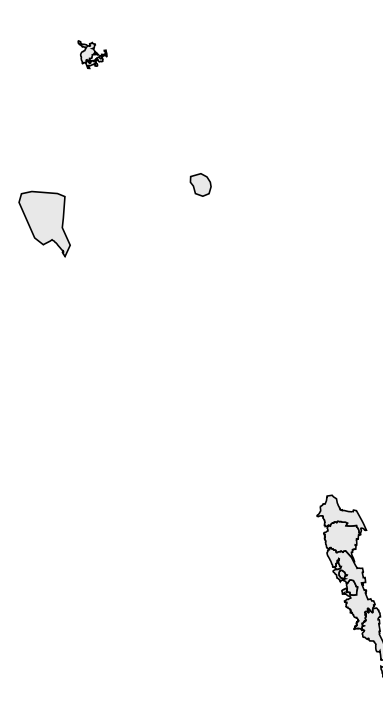
**b. Ukhia | Number of alerts**



**c. Teknaf | Number of cases**

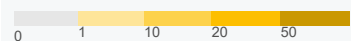


**d. Teknaf | Number of alerts**



## Map legend

Number of cases



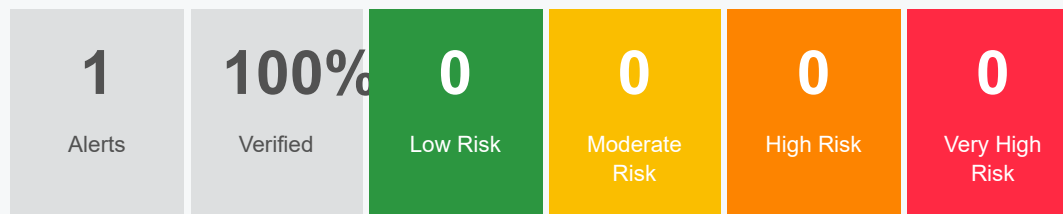
Number of alerts



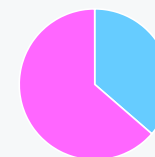
## Alert threshold

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

## Alert management (W31 2021)

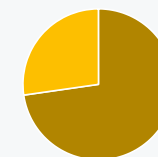


## Figure | % sex



Male Female

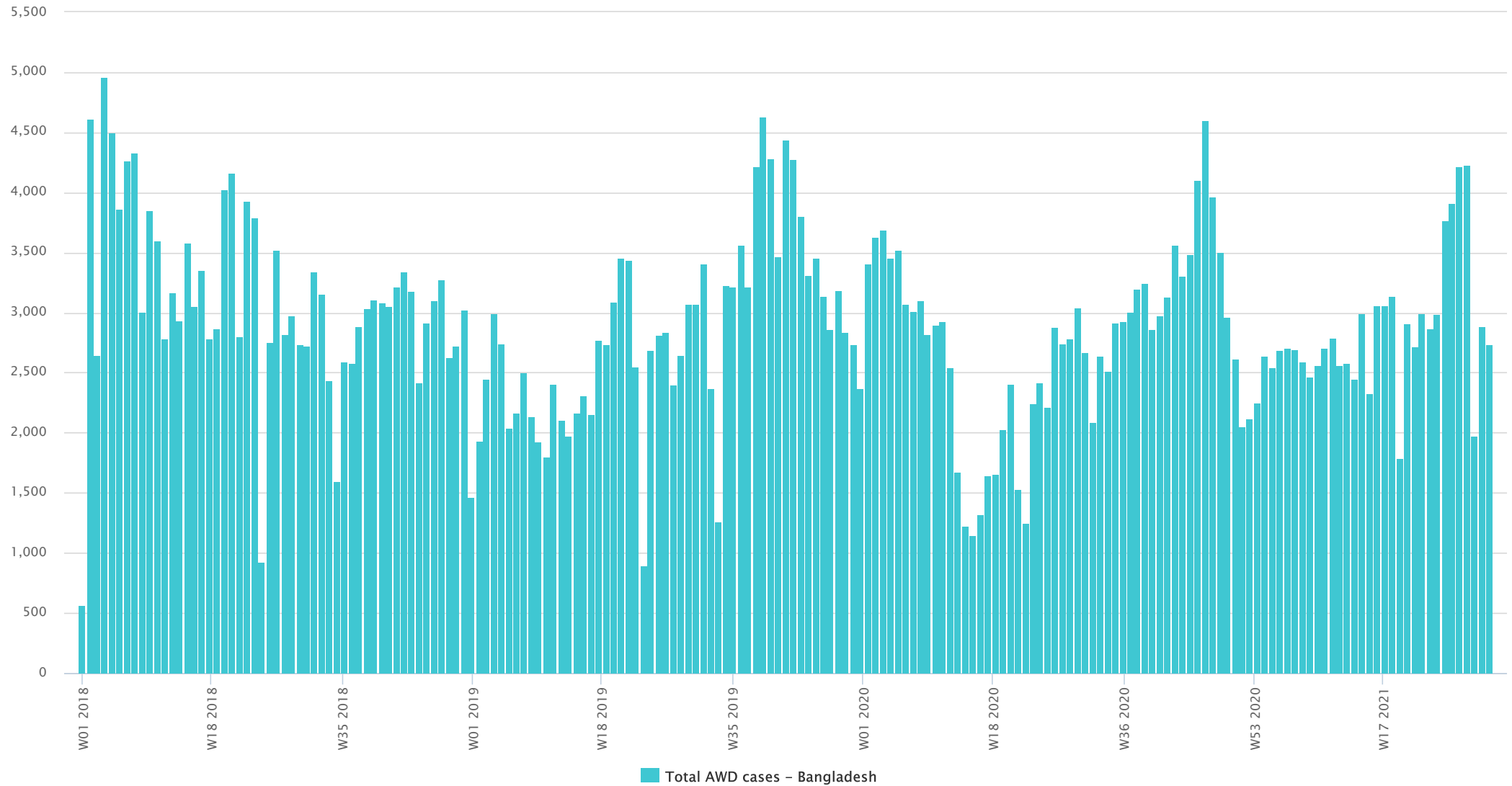
## Figure | % age



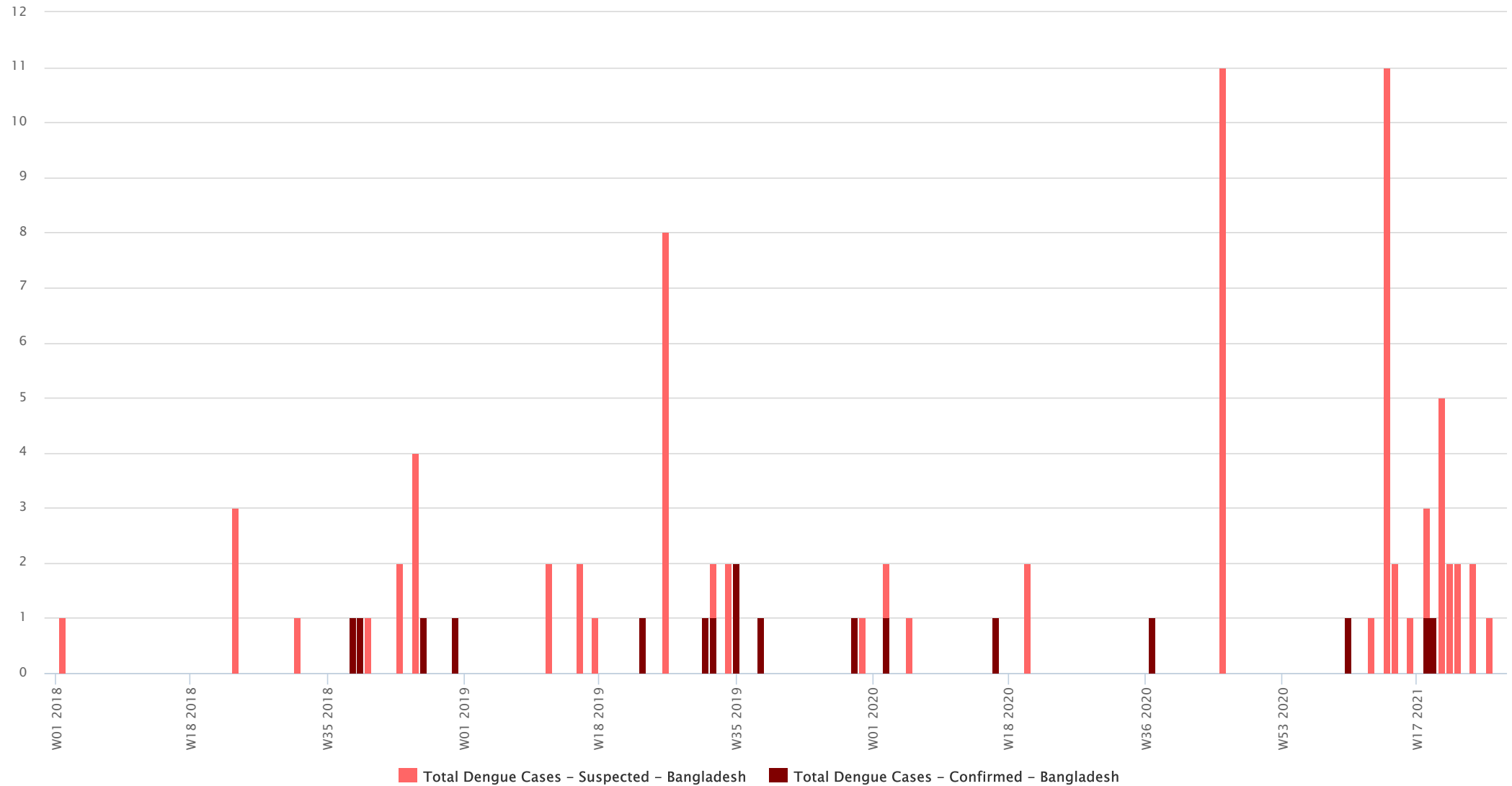
>= 5 < 5



**Figure 6** | Trend in number of cases over time (W38 2017 - W31 2021)



**Figure 7** | Trend in number of cases over time (W38 2017 - W31 2021)



Map 4 | Map of cases by camp (W37 2017 - W31 2021)

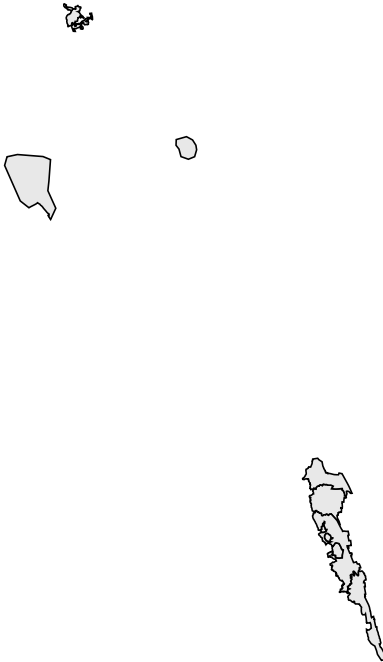
a. Ukhia | Number of cases



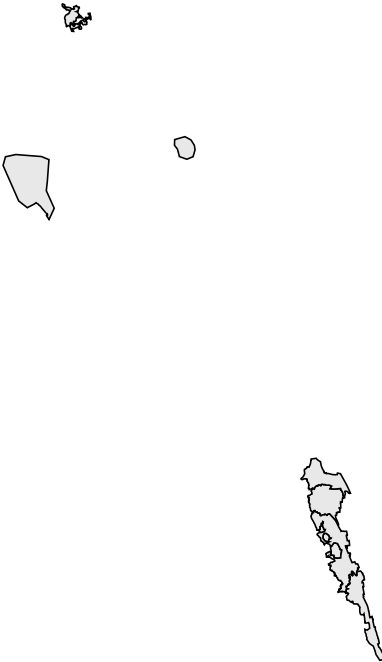
b. Ukhia | Number of alerts



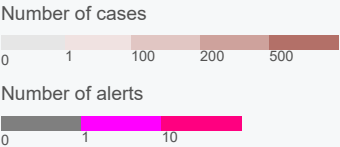
c. Teknaf | Number of cases



d. Teknaf | Number of alerts



Map legend



Alert threshold

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

Alert management (W31 2021)

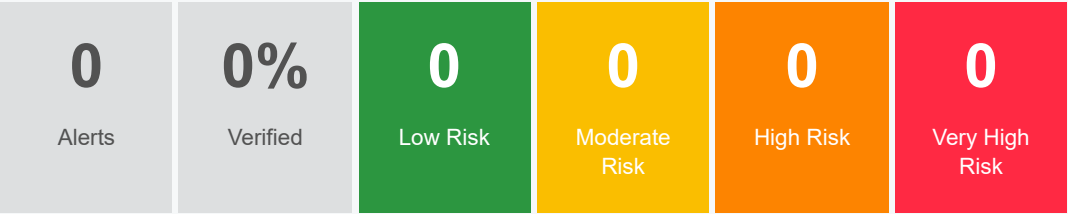


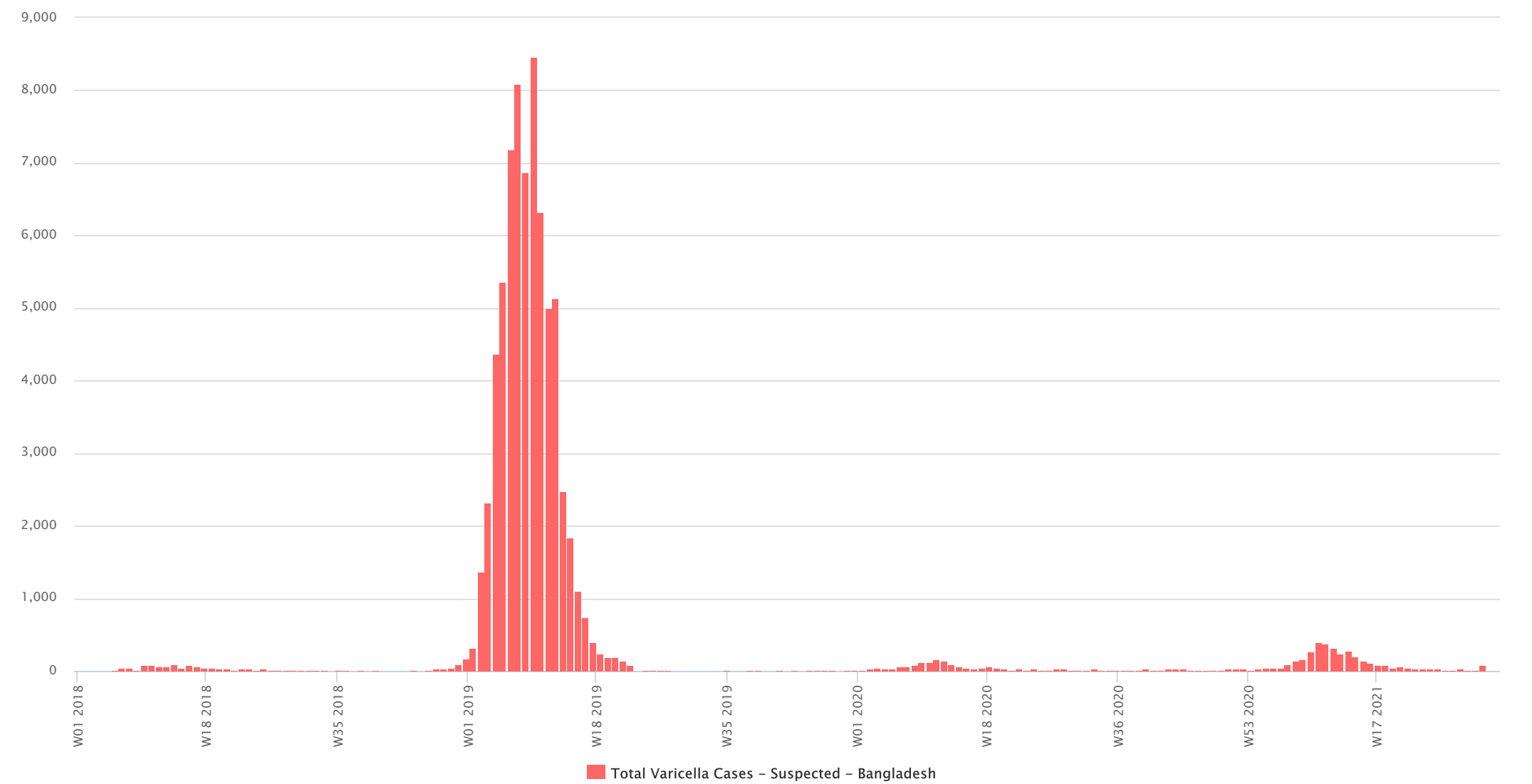
Figure | % sex

No data in chart

Figure | % age

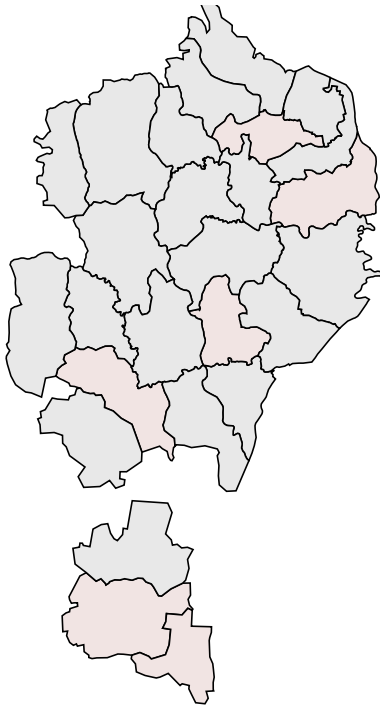
No data in chart

Figure 7 | Trend in number of cases over time (W38 2017 - W31 2021)

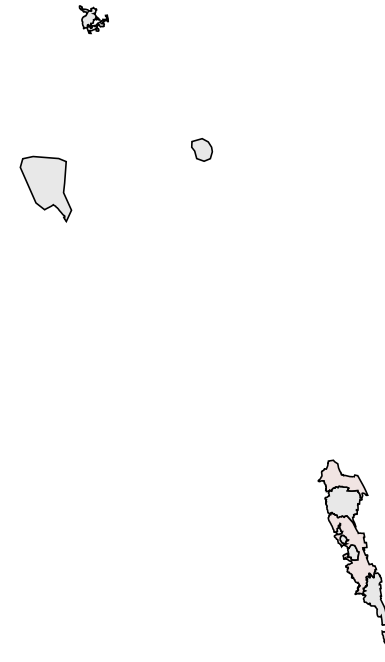


**Map 4** | Map of cases by camp (W37 2017 - W31 2021)

**a. Ukhia** | Number of cases

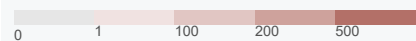


**c. Teknaf** | Number of cases



### Map legend

Number of cases

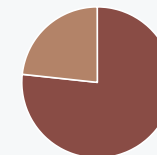


**Figure** | % sex



Female Male

**Figure** | % age



>= 5 < 5

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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>

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