



# Epidemiological Highlights

Week 20 (17-23 May 2021)



**World Health  
Organization**

# Highlights: COVID-19

As of week 20, (17-23 May 2021) there are 1,013 confirmed cases of COVID-19 (SARS-CoV-2), 42 483 samples were tested, total positivity rate (TPR) 2.4%.

This week (week 20), 247 new confirmed cases detected, 1 554 samples were tested, test positivity was 15.9%.

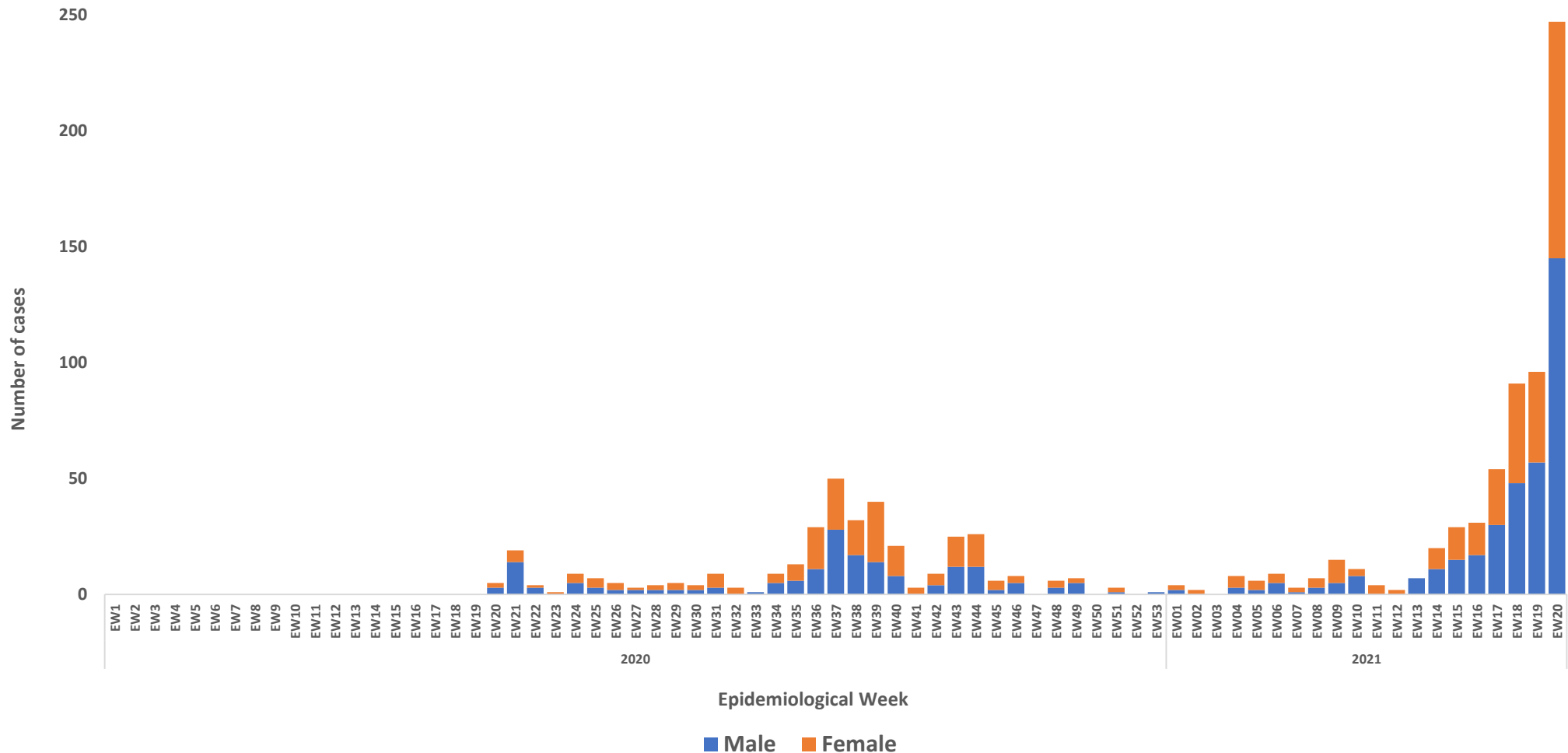
Cases per million in last 7 days 287.3 with a change in last 7 days 157%.

## As of this week (week 20)

- Median age of tested and confirmed cases is 10 (0-120) and 21 (0-90) years
- Female among tested and confirmed cases is 54% and 47%
- All 34/34 camps have confirmed cases (C24-91, C2W89, C4-80, C3-70, C15-70)
- A total of 17 deaths from COVID-19 with the case fatality rate 1.7%

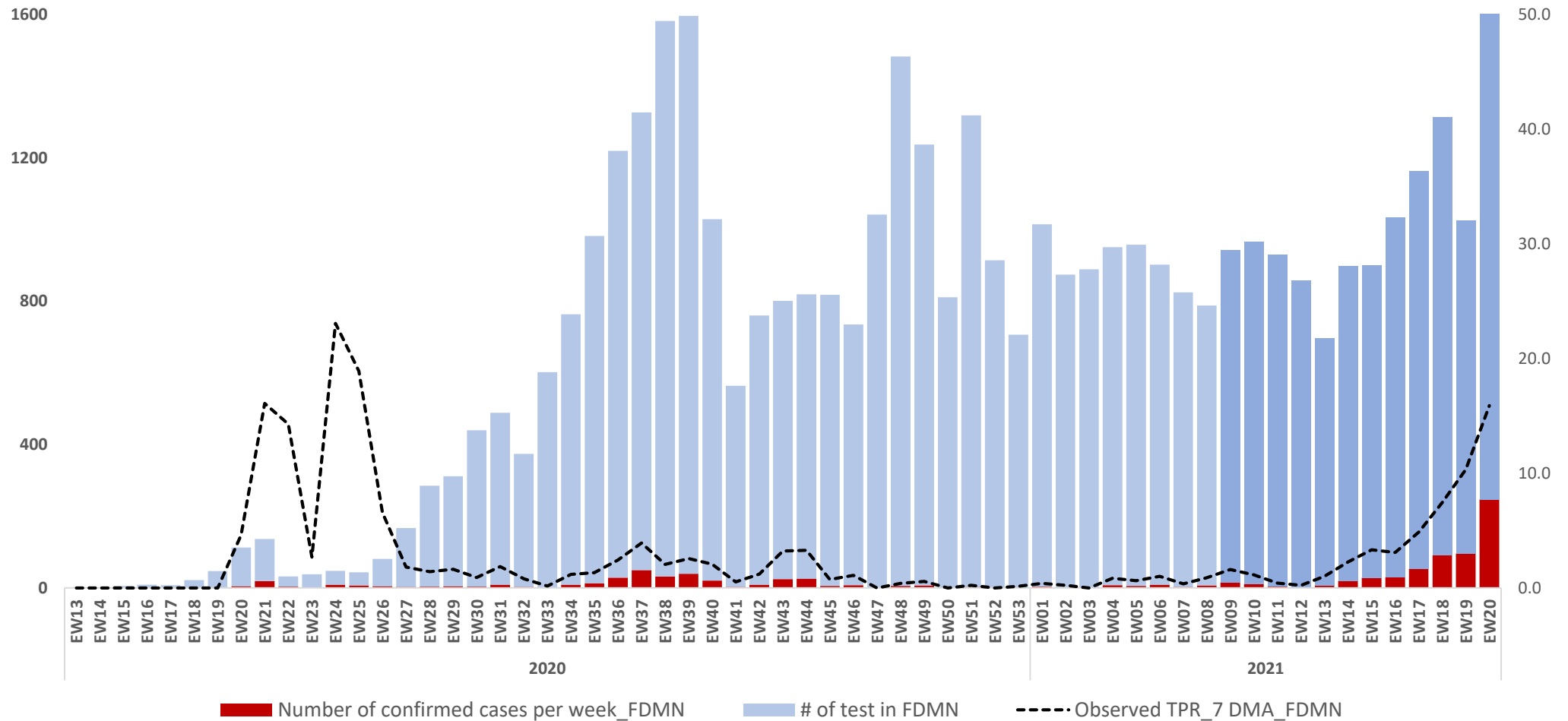
# Highlights: COVID-19

COVID-19 positive cases (n=1,013) by week of test

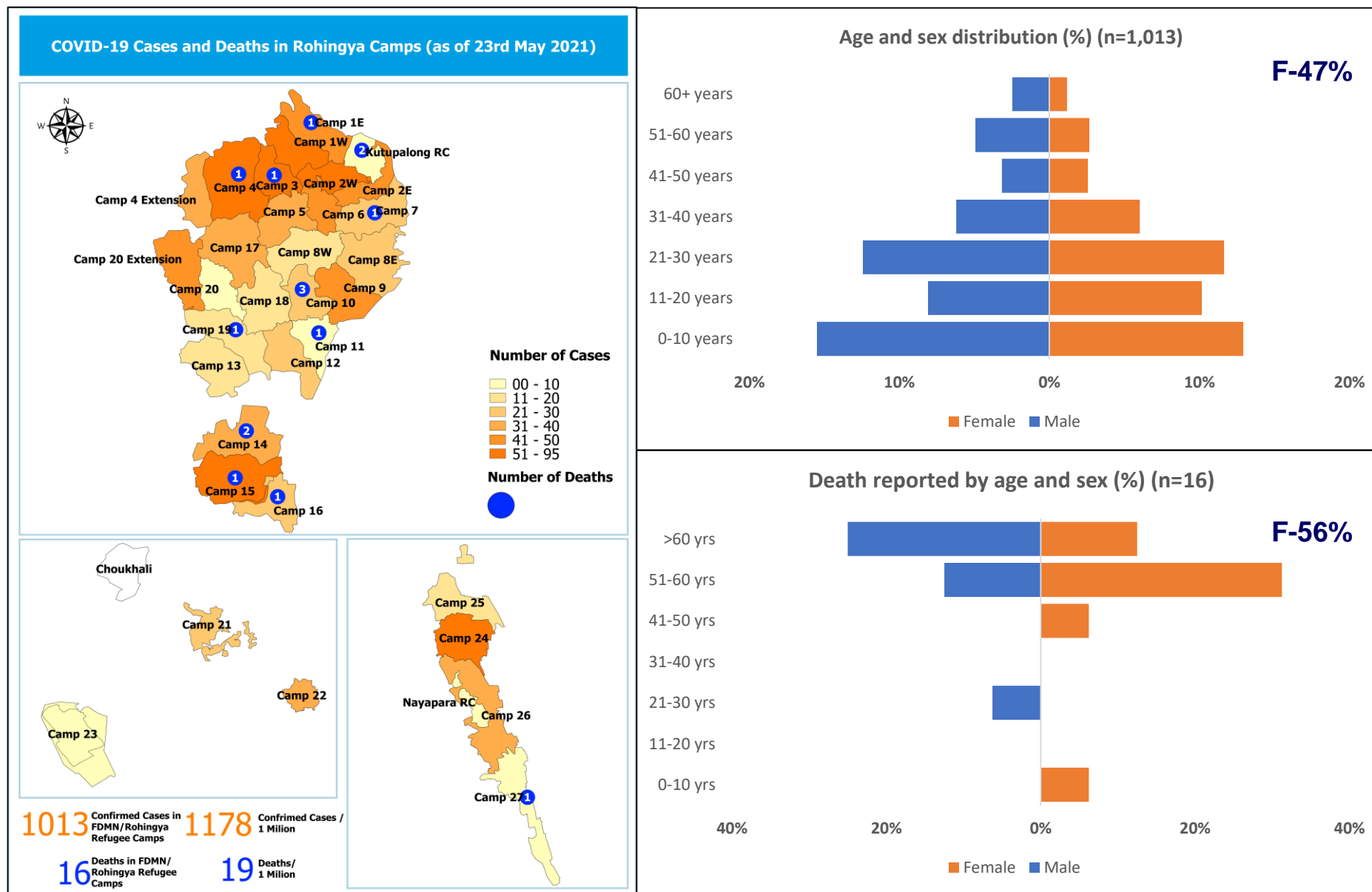


# Highlights: COVID-19

Test 42,483, case 1,013 and TPR 2.4 among refugees, 2020-2021 W20

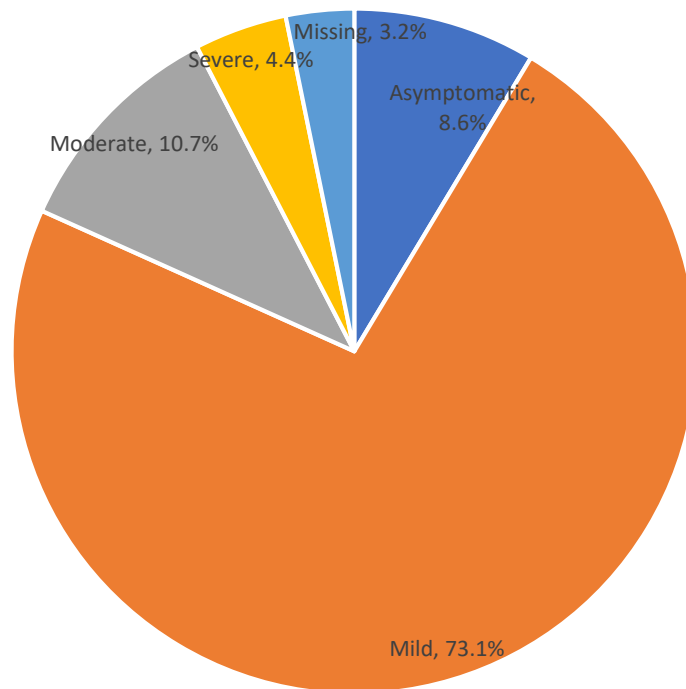


# Highlights: COVID-19

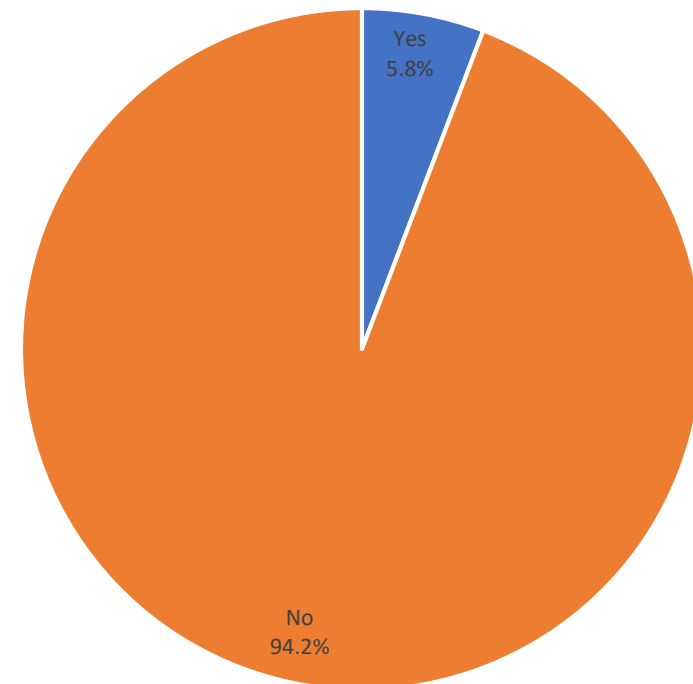


# Highlights: COVID-19

Severity of reported cases at presentation (n=777)



Did the case report at least 1 co-morbidity (n=777)



Source: Go.Data

# Highlights: COVID-19 Contact Tracing

- Total 777 (out of 1,013) confirmed cases have been investigated by Rapid Investigation and Response Team (RIRT) and captured through go.data as of week 20
- Total 2,364 contacts have been identified and registered for follow up
- Out of those, 1,758 (74%) contacts have been completed the follow up
- Fifty-three (3.1% out of contact completed follow up) contacts became tested positive for COVID-19.
- Average number of contacts is  $\sim 4$  per positive case

# EWARS Reporting Updates

- Total 172 health facilities registered in EWARS
- Only 129/172 weekly reports received on time in week 20
- Seventy-two (72) alerts were triggered in week 20
- Timeliness for this week is 75%
- All alerts were reviewed and verified by WHO EWARS team, the number is more than that of previous week (34 in week 20).



# Highlights:

- Acute Respiratory Infection (18.0%), Diarrheal Diseases (5.1%) & unexplained fever (1.8%) are the diseases with highest proportional morbidity in week 20.
- Suspected SARI death under enhanced Community-based mortality surveillance has been continued since week 28, 2020.
  - Eighty-six (86) suspected SARI deaths have been reported so far and reviewed subsequently by Rapid Investigation and Response Team (RIRT) for COVID-19.
  - Total ten (10) SARI deaths were considered as death due to probable COVID-19 till date.

# Diphtheria

Four (04) suspected diphtheria case was reported in go.data in week 20

A total of 9 274 case-patients were reported since 2017 to till date

- Confirmed = 343
- Probable = 2 803
- Suspected = 6 128

Total case reported in 2021 = 88

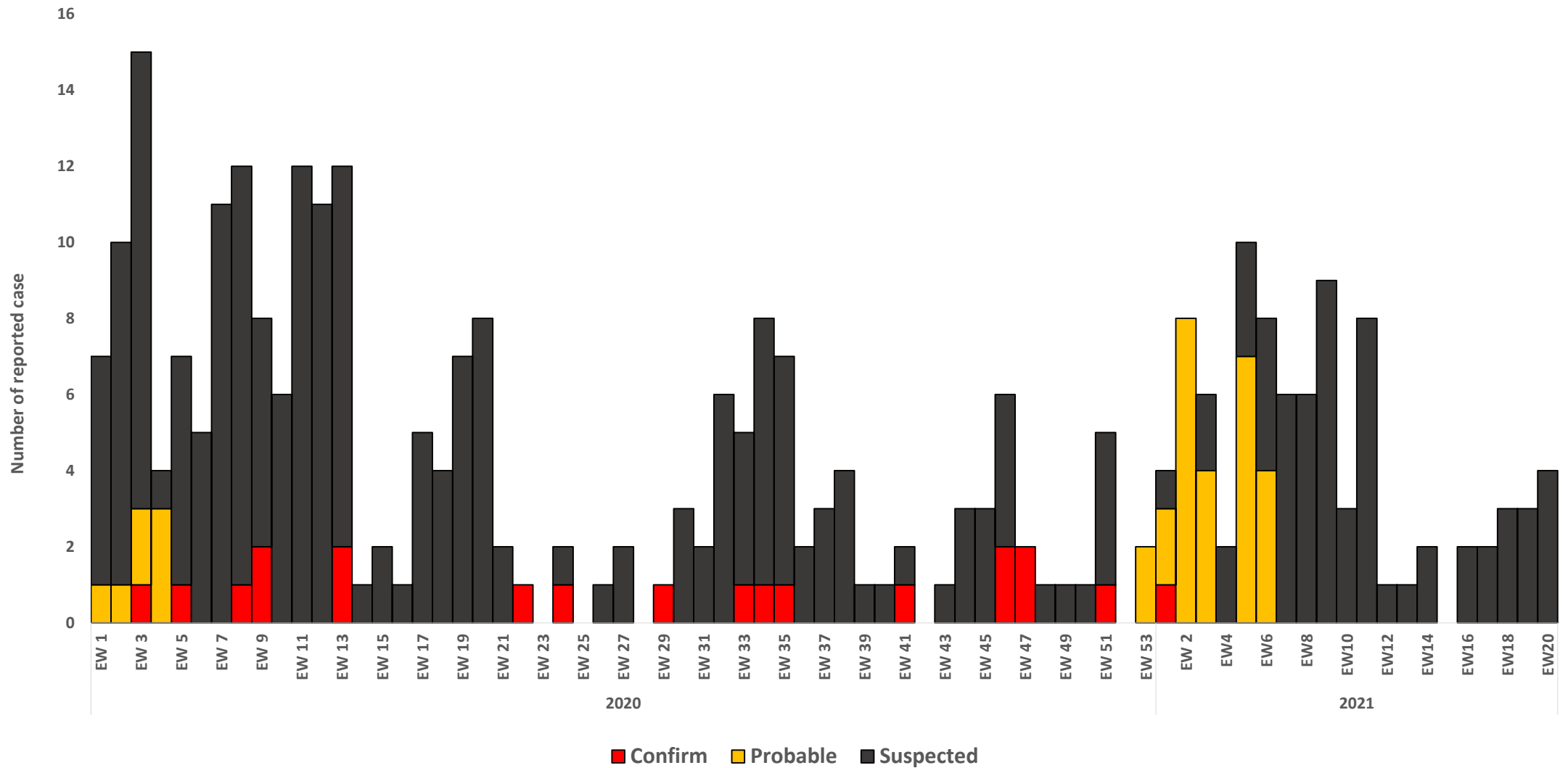
- Confirmed = 1
- Probable = 25
- Suspected = 62

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

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

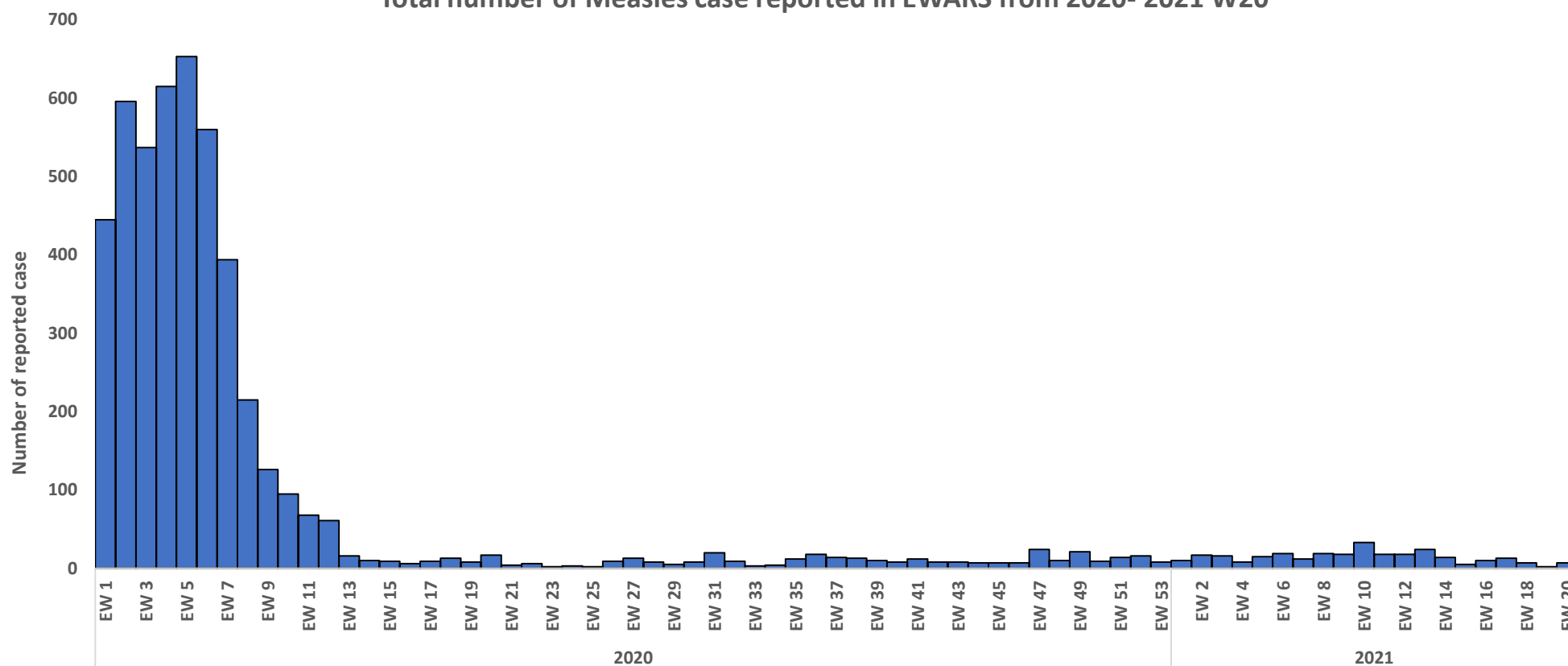
# Diphtheria

Total number of diphtheria case reported in EWARS from 2020-2021 W20



# Measles

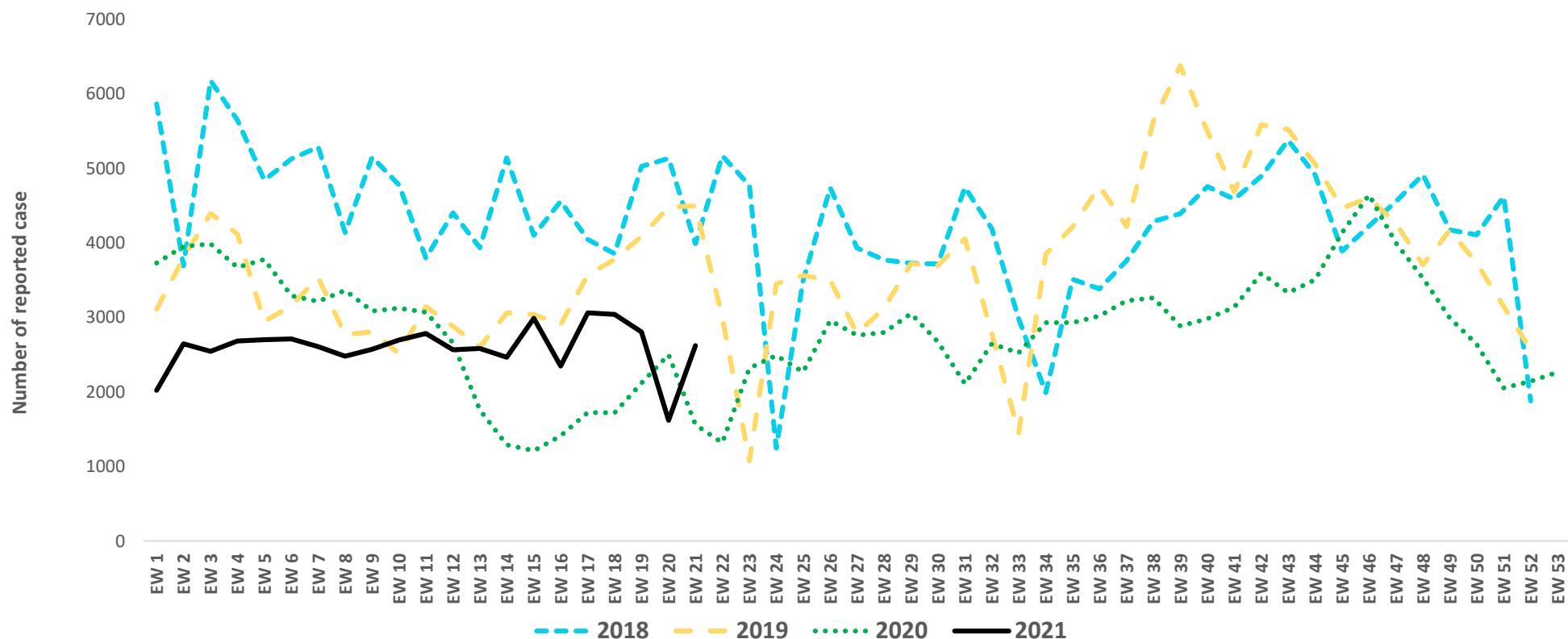
Total number of Measles case reported in EWARS from 2020- 2021 W20



In week 20, 7 suspected measles cases were reported through weekly reporting make 285 cases in total in 2021. Out of those 218 cases (76%) reported through case-based reporting and samples collected for laboratory confirmation.

# Diarrhoeal Disease

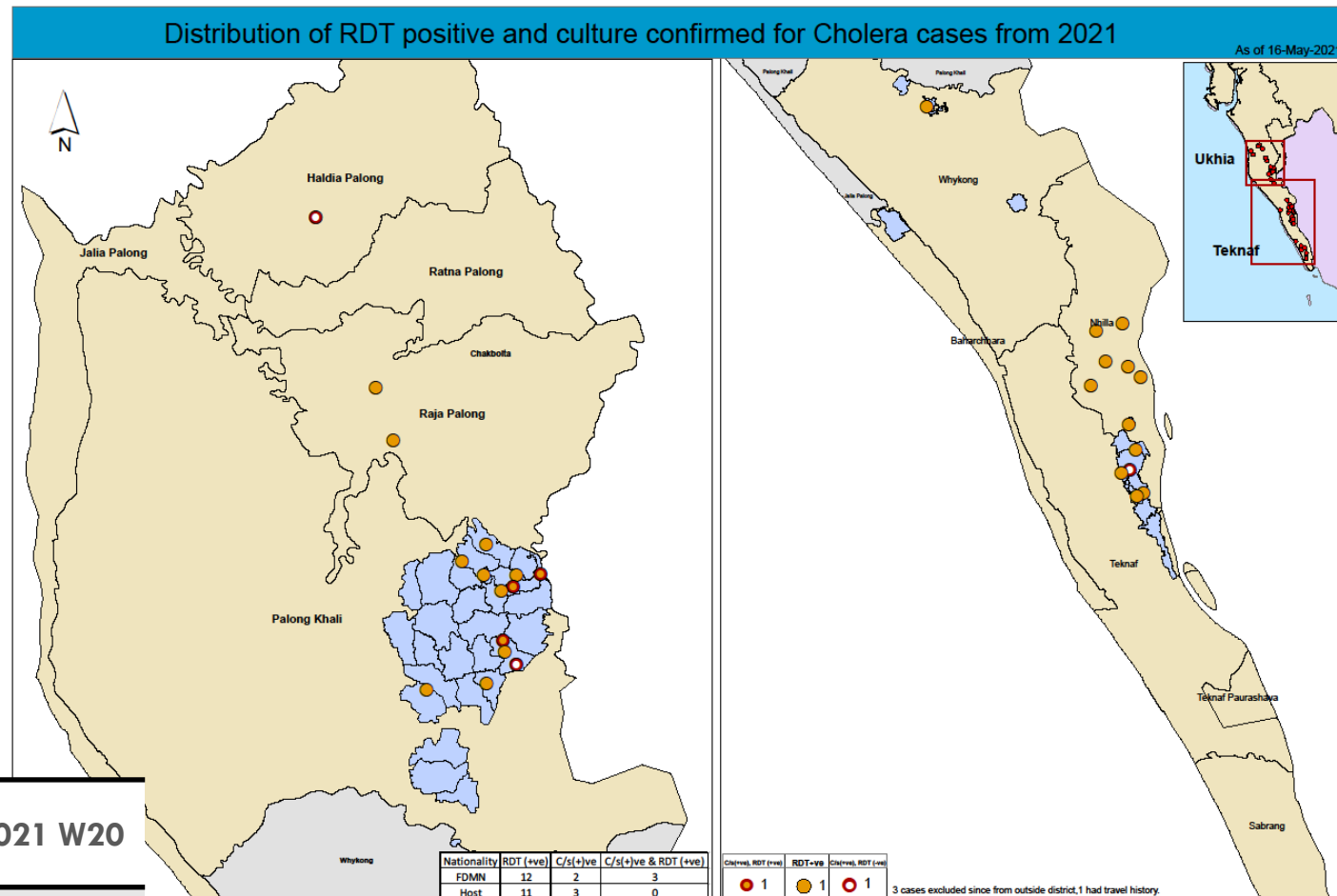
Total number of AWD case reported in EWARS from 2018-2021 W20



- A total of 3,116 cases of diarrhoeal diseases reported in EWARS in week 20.
- Among which 2,249 cases (3.7%) reported as acute watery diarrhoea (AWD), remaining 619 (1.0%) and 248 (0.4%) cases as other and bloody diarrhea, respectively.

# Cholera Surveillance

- Total thirty-nine (39) Cholera RDT positive/culture cases reported as of W20 2021. Out of those 9 were confirmed and 24 by culture and remaining 6 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 W20
RDT positive for Cholera	49	258	28	30
Culture Confirmed for Cholera	7	184	5*	9

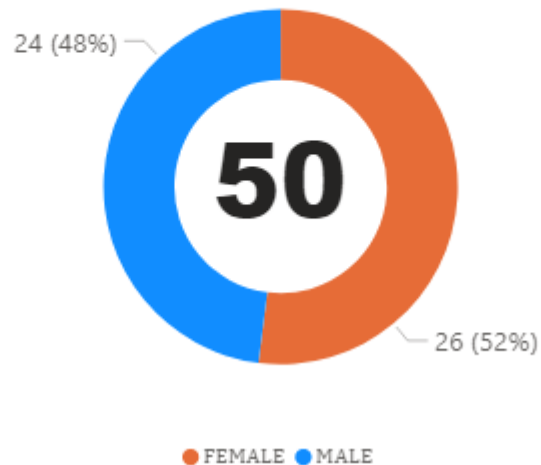
\*3 culture confirmed cases were RDT negative in 2020

# Community-based Mortality surveillance

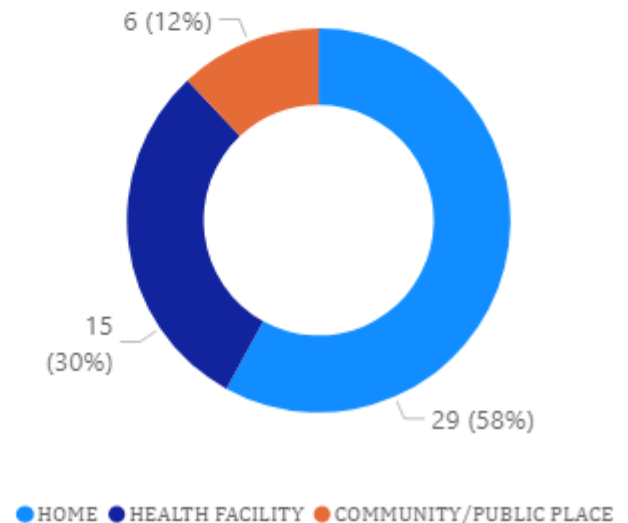
- In week 20, 50 deaths were recorded -
  - 64% (n=32) were due to causes classified as “Others”
  - 12% (n=6) as still birth (Born Dead)
  - 8% (n=4) as neonatal (<28 days old)
  - 6% (n=3) as injury
  - 2% (n=1) as infectious disease
  - 2% (n=1) as severe acute respiratory infection (SARI)
  - 6% (n=3) as maternal death
- Out of reported deaths, 30% occurred in health facilities and 58% at homes and 12% from community/public place
- Partners to report all mortalities into EWARS platform using both case and event-based reporting as applicable.

# Community-based Mortality Surveillance

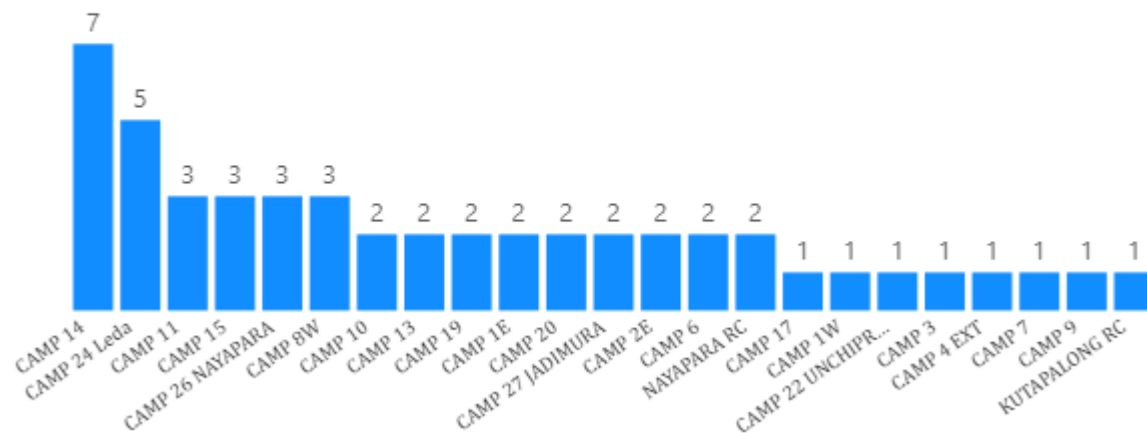
**Gender distribution**



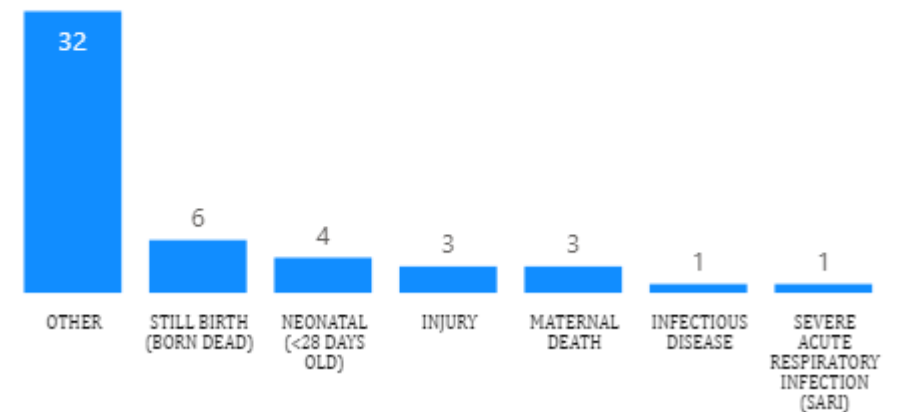
**Place of death**



**Distribution of deceased Camp**



**Distribution of Probable cause of death**





# Bangladesh

Rohingya Emergency Response

Early Warning, Alert and  
Response System (EWARS)

Epidemiological Bulletin W20 2021



Ministry of Health and Family  
Welfare Bangladesh



World Health  
Organization



HEALTH SECTOR  
COX'S BAZAR



Printed: 11:32 Tuesday, 25 May 2021 UTC

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## Sources of data

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

## Highlights W20 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>172</b>	<b>98%</b>	Number of EWARS reporting sites

**Table 2 | Early warning performance indicators**

W20	Cumulative (2021)	
<b>129</b>	<b>3221</b>	Number of weekly reports received
<b>75%</b>	<b>88%</b>	Completeness
<b>75%</b>	<b>83%</b>	Timeliness

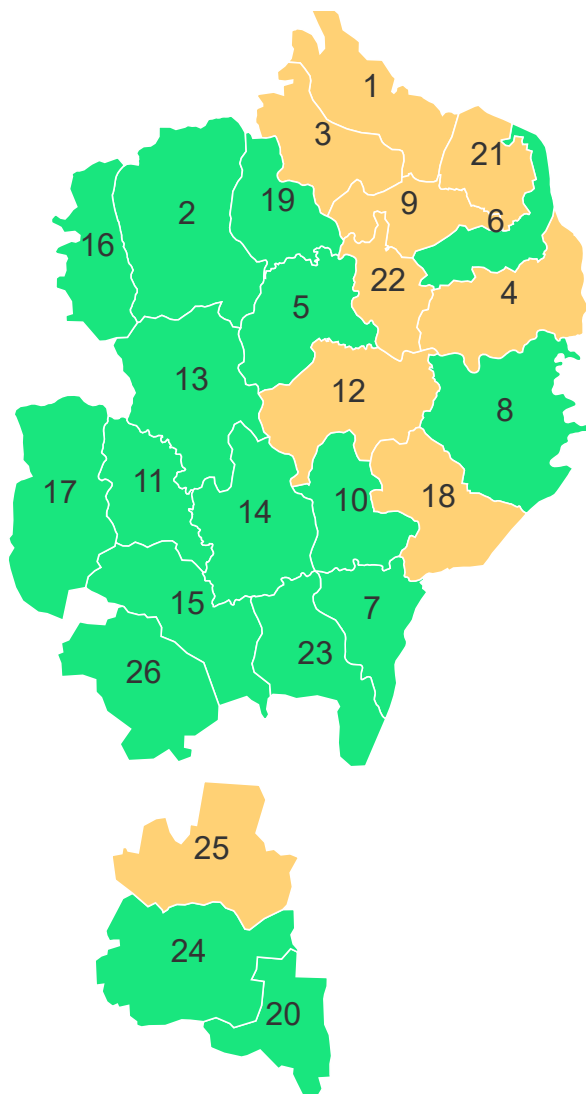
**Table 3 Alert performance indicators**

W20	Cumulative (2021)	
<b>72</b>	<b>1,340</b>	Total alerts raised
<b>100%</b>	<b>100%</b>	% verified
<b>0%</b>	<b>0%</b>	% auto-discarded
<b>3%</b>	<b>1%</b>	% undergoing risk assessment
<b>0%</b>	<b>1%</b>	% completed risk assessment

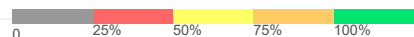
<sup>1</sup> Source: UNHCR. Bangladesh: Joint Government of Bangladesh- UNHCR Population Factsheet. 31 December 2020.

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

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

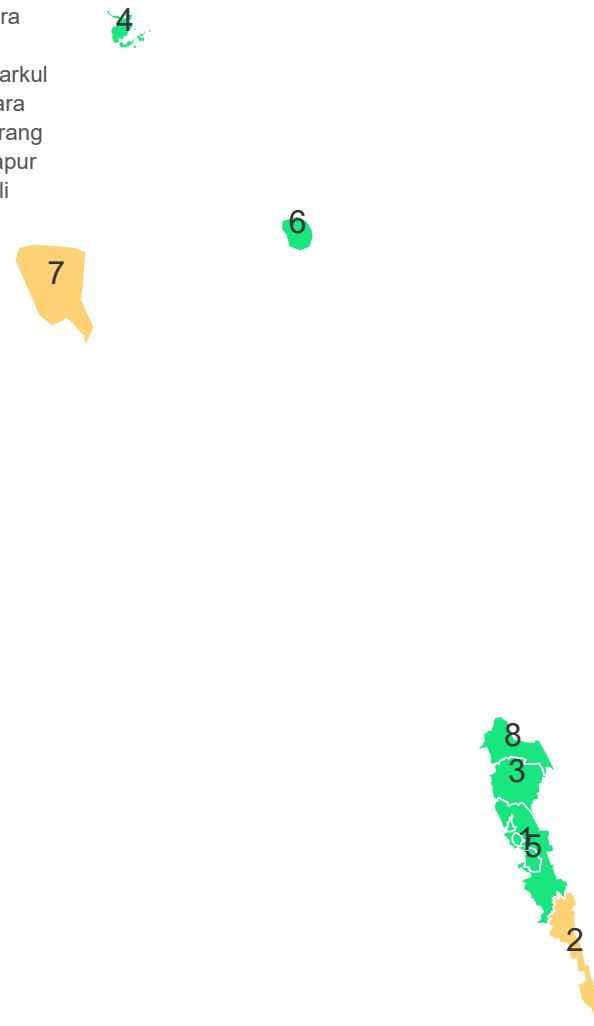


Completeness



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

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



Completeness

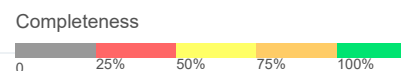
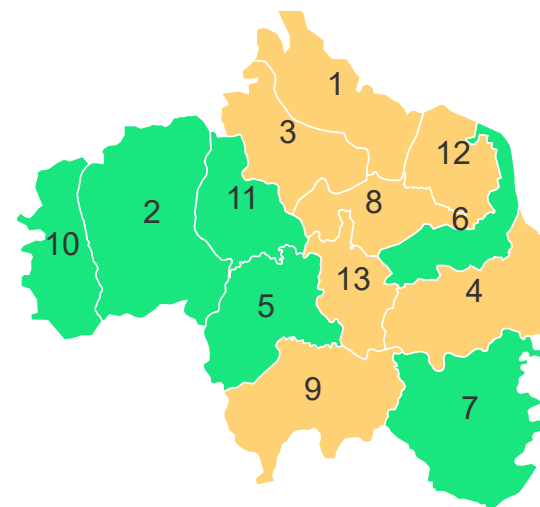


**Table 4 | Performance by camp (W20 2021)**

Northern group	Reporting		Performance	
	# health facilities	# reports received	Completeness	Timeliness
Ukhia Northern Group				
Camp 1E	4	2	50%	50%
Camp 1W	4	2	50%	50%
Camp 2E	3	3	100%	100%
Camp 2W	3	2	67%	67%
Camp 3	6	5	83%	83%
Camp 4	6	6	100%	100%
Camp 4 Ext	1	1	100%	100%
Camp 5	5	4	80%	80%
Camp 6	3	2	67%	67%
Camp 7	6	3	50%	50%
Camp 8E	8	6	75%	75%
Camp 8W	6	4	67%	67%
Kutupalong RC	2	1	50%	50%

**Map 2 | Completeness by camp**

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

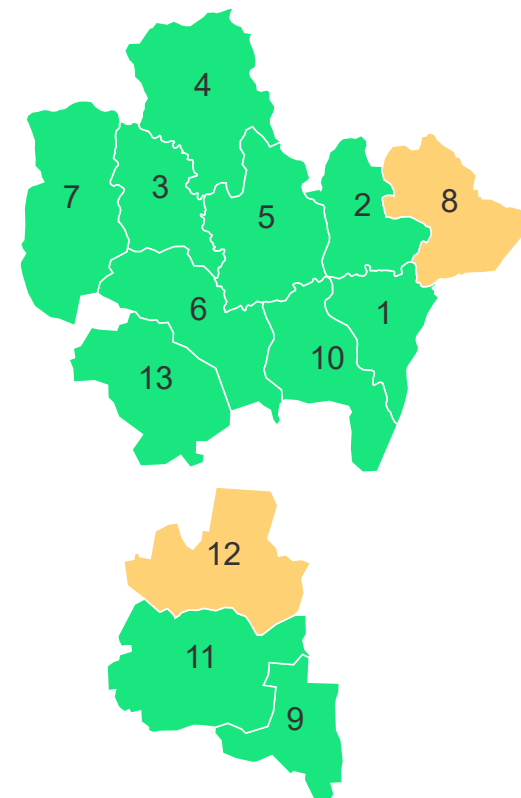


**Table 5** | Performance by camp (W20 2021)

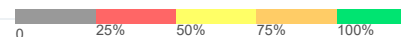
Southern group	Reporting		Performance	
	# health facilities	# reports received	Completeness	Timeliness
Ukhia Southern Group				
Camp 10	4	4	100%	100%
Camp 11	9	7	78%	78%
Camp 12	6	5	83%	83%
Camp 13	9	8	89%	89%
Camp 14	7	4	57%	57%
Camp 15	9	7	78%	78%
Camp 16	5	4	80%	80%
Camp 17	5	4	80%	80%
Camp 18	5	4	80%	80%
Camp 19	6	5	83%	83%
Camp 20	3	3	100%	100%
Camp 20 Ext	2	2	100%	100%
Camp 9	6	3	50%	50%

**Map 3** | Completeness by camp

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



Completeness



**Table 6** | Performance by camp (W20 2021)

Teknaf	Reporting		Performance	
	# health facilities	# reports received	Completeness	Timeliness
Ukhia Teknaf				
Camp 21 Chakmarkul	4	3	75%	75%
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	2	1	50%	50%
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 26 Nayapara
- 6 Camp 22 Unchiprang
- 7 Camp 23 Shamlapur
- 8 Camp 25 Ali Khali

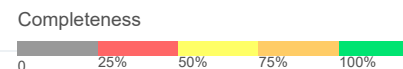
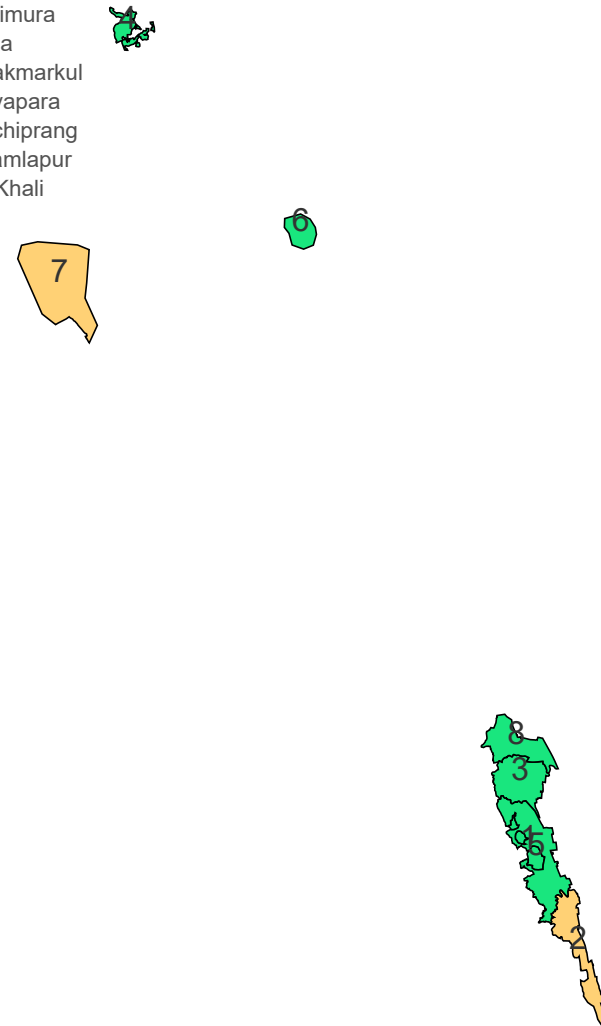



Table 7 | Performance by partner (W20 2021)

Partner	Performance		Reporting		Partner	Performance		Reporting	
	# sites	# reports received	Completeness	Timeliness		# sites	# reports received	Completeness	Timeliness
BDRCS	12	11	92%	92%	FH/MTI	3	3	100%	100%
BRAC	11	11	100%	100%	PHD	10	10	100%	100%
CARE		4	100%	100%	PWJ	1	1	100%	100%
FHM		0			RHU	3	3	100%	100%
FRNDS		2	17%	17%	RI	3	3	100%	100%
GK		7	70%	70%	RTMI	11	10	91%	91%
HMBDF		0	0%	0%	SCI	7	7	100%	100%
IOM	23	18	78%	78%	TdH	1	1	100%	100%
IRC	2	2	100%	100%					
MSF	9	6	67%	67%					
MoH	7	2	29%	29%					
Hope	4	4	100%	100%					
Medair	2	2	100%	100%					



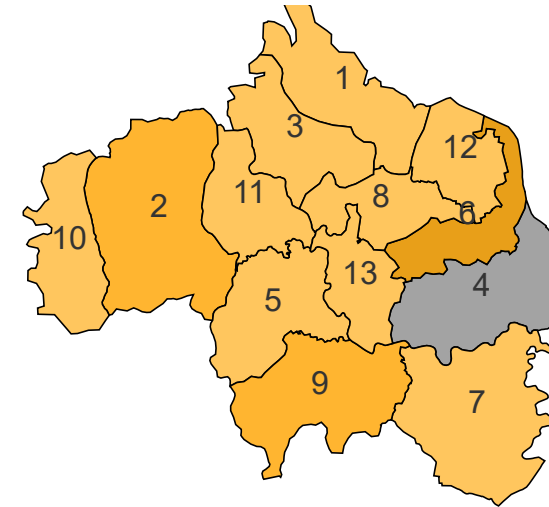
## Alert | Ukhia (Northern Group)

**Table 8 | Performance by camp**

Northern group	W20		Cumulative (2021)	
	# alerts	% verif.	# alerts	% verif.
Alerts Northern group				
Camp 1E	2	100%	25	100%
Camp 1W	1	100%	43	100%
Camp 2E	9	100%	107	100%
Camp 2W	1	100%	32	100%
Camp 3	2	100%	65	100%
Camp 4	3	100%	64	100%
Camp 4 Ext	1	100%	10	100%
Camp 5	2	100%	59	100%
Camp 6	1	100%	36	100%
Camp 7	0	0%	14	100%
Camp 8E	1	100%	20	100%
Camp 8W	4	100%	74	100%
Kutupalong RC	1	100%	17	100%

**Map 5 | Number of alerts by camp**

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

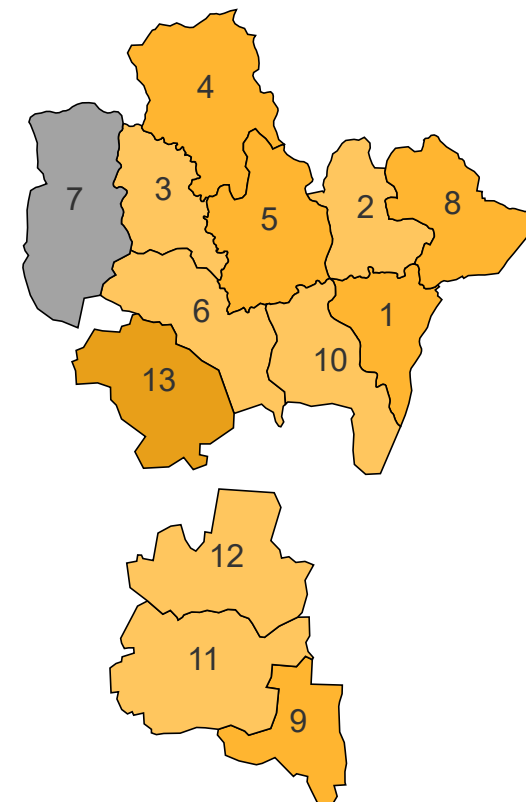


Table 9 | Performance by camp

Southern group	W20		Cumulative (2021)	
	# alerts	% verif.	# alerts	% verif.
Alerts Northern group				
Camp 10	2	100%	46	100%
Camp 11	4	100%	46	100%
Camp 12	2	100%	49	100%
Camp 13	6	100%	55	100%
Camp 14	1	100%	37	100%
Camp 15	2	100%	48	100%
Camp 16	4	100%	63	100%
Camp 17	4	100%	38	100%
Camp 18	3	100%	58	100%
Camp 19	2	100%	31	100%
Camp 20	2	100%	32	100%
Camp 20 Ext	0	0%	18	100%
Camp 9	3	100%	52	100%

Map 6 | Number of alerts by camp

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



# of alerts

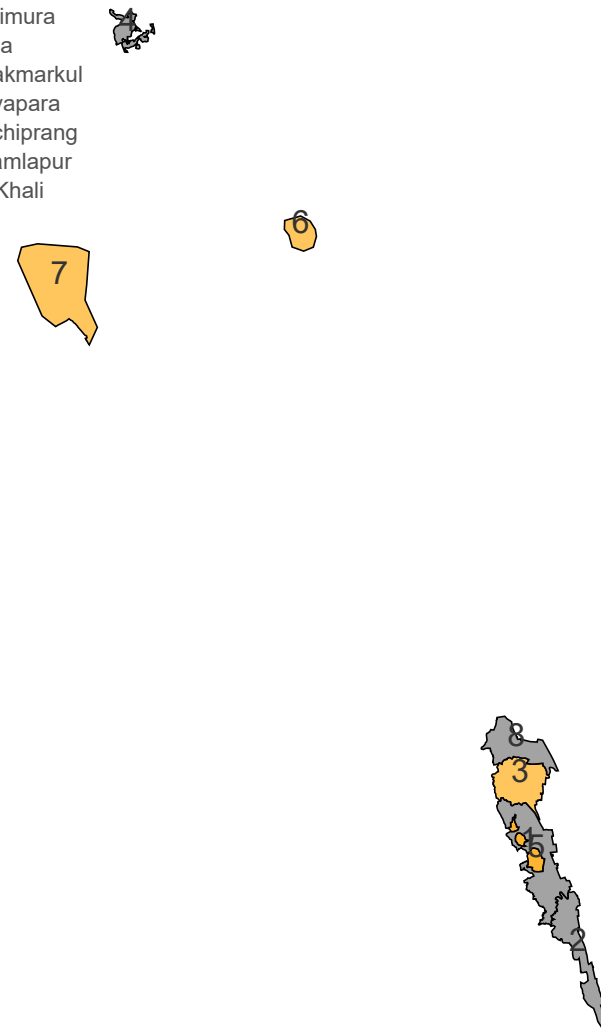


Table 10 | Performance by camp

Teknaf	W20		Cumulative (2021)	
	# alerts	% verif.	# alerts	% verif.
Alerts Northern group				
Camp 21 Chakmarkul	0	0%	11	100%
Camp 22 Unchiprang	2	100%	27	100%
Camp 23 Shamlapur	1	100%	13	100%
Camp 24 Leda	2	100%	32	100%
Camp 25 Ali Khali	0	0%	10	100%
Camp 26 Nayapara	0	0%	62	100%
Camp 27 Jadimura	0	0%	8	100%
Nayapara RC	3	100%	18	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 26 Nayapara
- 6 Camp 22 Unchiprang
- 7 Camp 23 Shamlapur
- 8 Camp 25 Ali Khali



# of alerts



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

Event	W20		Cumulative (2021)	
	# alerts	% verif.	# alerts	% verif.
<b>Indicator-based surveillance</b>				
Malaria	0	0%	2	100%
Measles	7	100%	188	100%
Bloody Diarr.	0	0%	0	0%
AFP	0	0%	5	100%
Meningitis	1	100%	21	100%
Haem. fever (susp.)	0	0%	3	100%
NNT	0	0%	0	0%
Unexp. fever	6	100%	59	100%
AWD	7	100%	121	100%
ARI	8	100%	96	100%
AJS	1	100%	12	100%
Varicella (Susp.)	0	0%	29	100%
Suspected COVID-19	0	0%	0	0%
<b>Event-based surveillance</b>				
EBS total	3	100%	99	100%

**Table 12** | Risk assessment

W20	Cumulative (2021)	
0	14	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



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HEALTH SECTOR  
COX'S BAZAR



Global  
**EWARS**

# Bangladesh

Rohingya Emergency Response

Early Warning, Alert and  
Response System (EWARS)

Annex W20 2021



Ministry of Health and Family  
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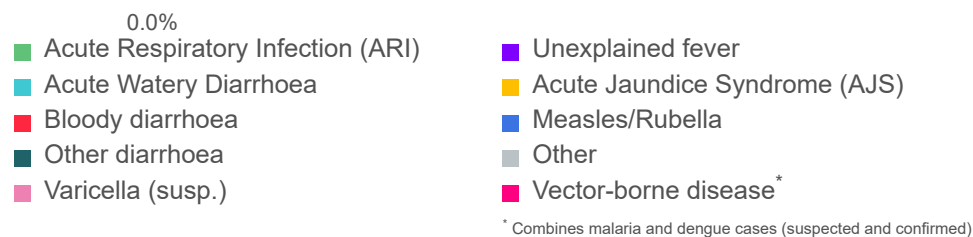
HEALTH SECTOR  
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# Proportional morbidity

**Figure 1 | Proportional morbidity (W20 2021)**



Disease	W20		2021	
	# cases	% morbidity	# cases	% morbidity
AWD	2,249	3.7%	54,237	3.2%
Bloody diarr.	248	0.4%	6,936	0.4%
Other diarr.	619	1.0%	18,709	1.1%
Susp. Varicella	49	0.1%	3,134	0.2%
ARI	10,942	18.0%	321,146	18.7%
Measles/Rub.	7	0.0%	293	0.0%
AFP	0	0.0%	6	0.0%
Susp. menin.	3	0.0%	63	0.0%
AJS	11	0.0%	176	0.0%
Susp. HF	0	0.0%	4	0.0%
Neo. tetanus	0	0.0%	0	0.0%
Adult tetanus	0	0.0%	1	0.0%
Malaria (conf.)	1	0.0%	19	0.0%
Malaria (susp.)	1,273	2.1%	10,203	0.6%
Dengue (conf.)	0	0.0%	3	0.0%
Dengue (susp.)	5	0.0%	22	0.0%
Unexpl. fever	1,127	1.8%	18,503	1.1%
Sev. Malnut.	20	0.0%	740	0.0%
Inj./Wounds	1,793	2.9%	46,374	2.7%
Other	42,541	69.8%	1,237,959	72.0%
<b>Total</b>	<b>59,794</b>	<b>100%</b>	<b>1,719,462</b>	<b>100%</b>

## Trend in consultations and key diseases

**Figure 2** | Trend in proportional morbidity for key diseases (W20)

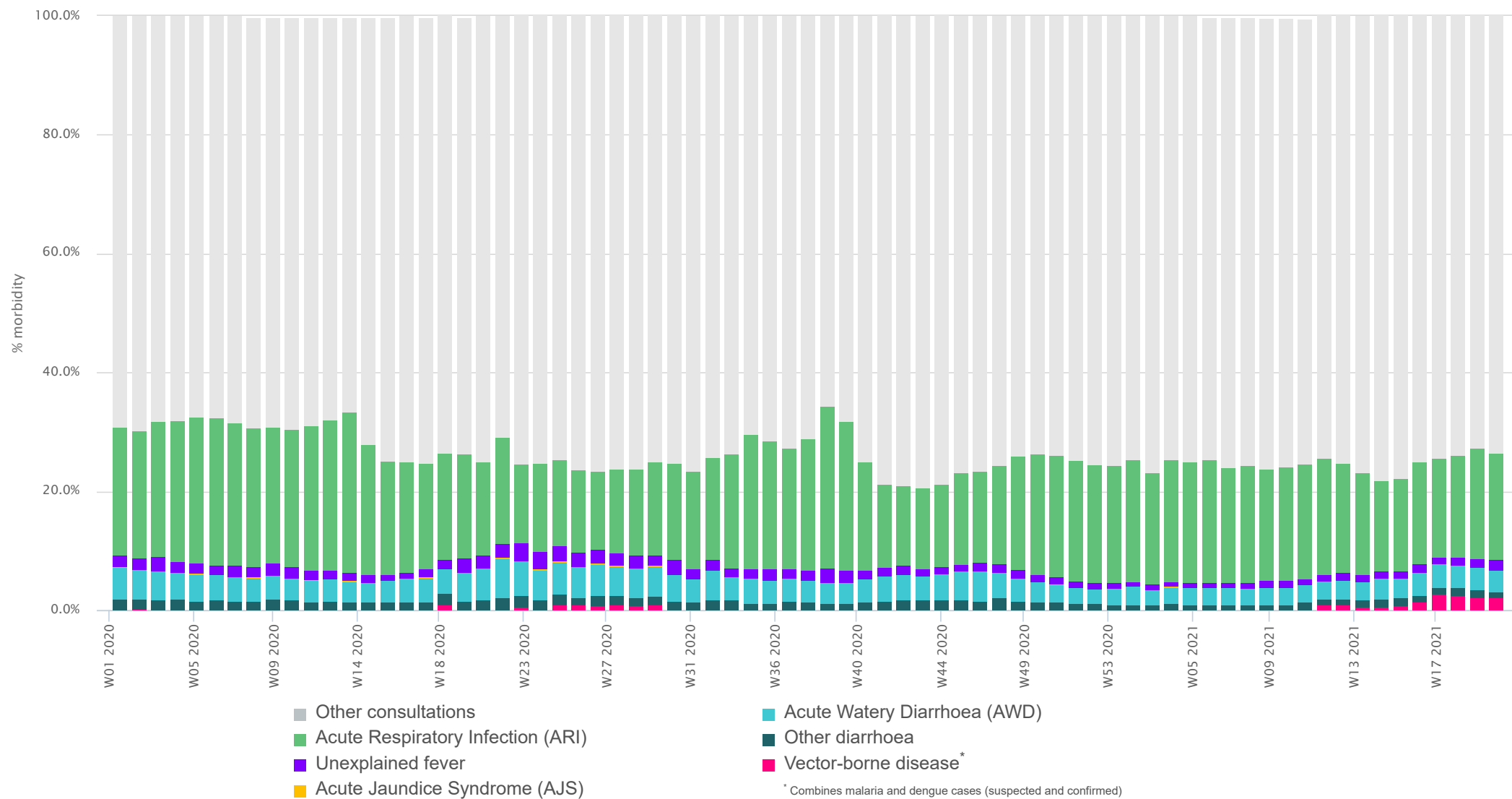
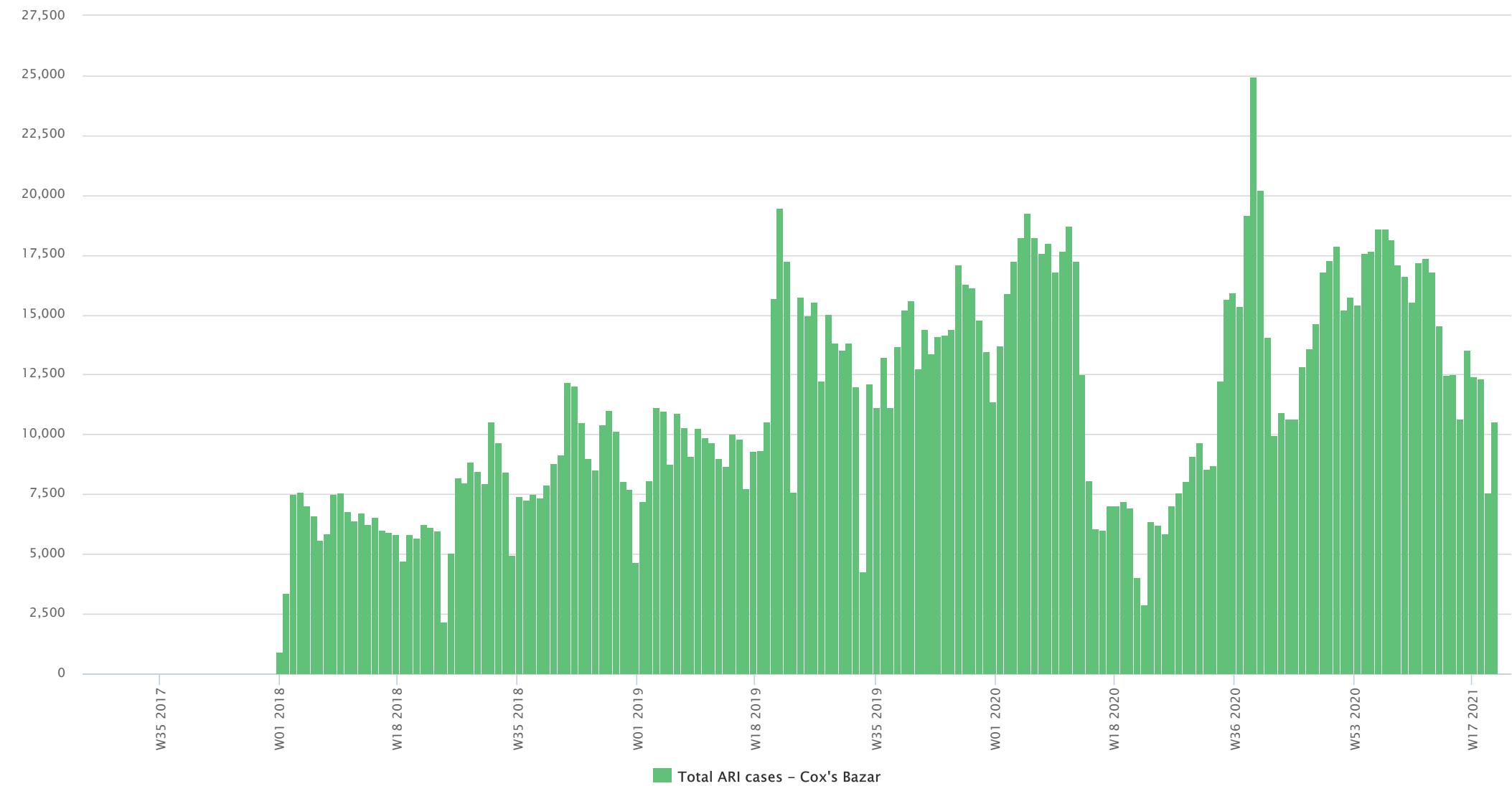


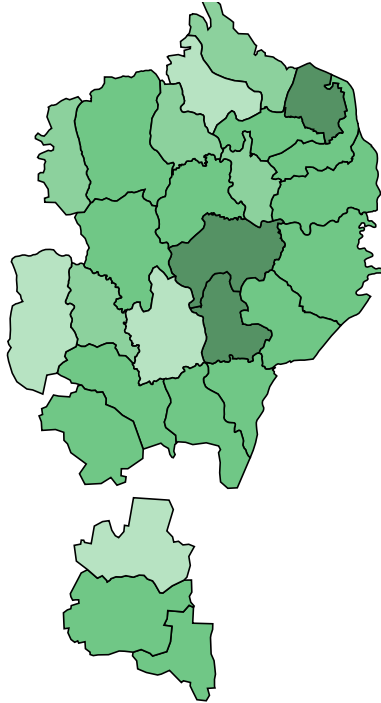


Figure 3 | Trend in number of cases over time (W38 2017 - W20 2021)

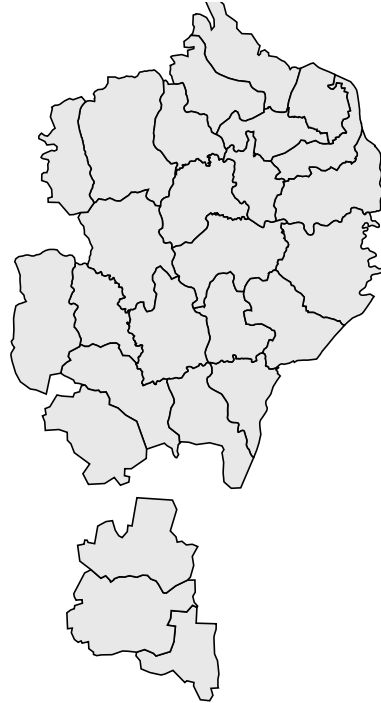


**Map 1** | Map of cases by camp (W20 2021)

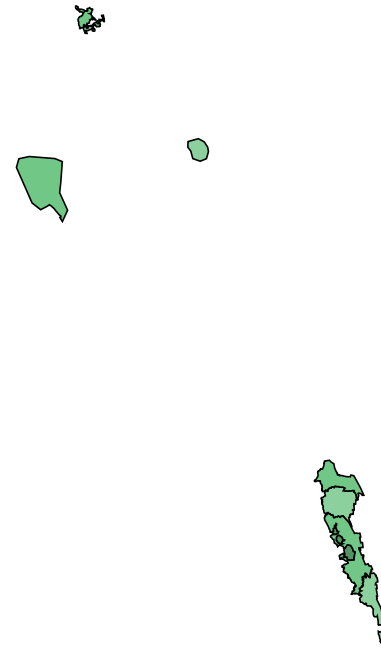
**a. Ukhia** | Number of cases



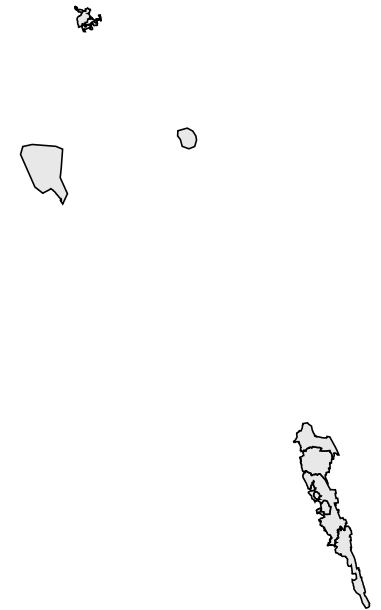
**b. Ukhia** | Number of alerts



**c. Teknaf** | Number of cases



**d. Teknaf** | Number of alerts



## Map legend

Number of cases



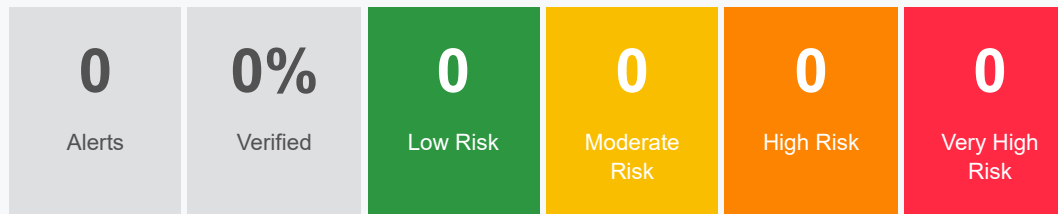
Number of alerts



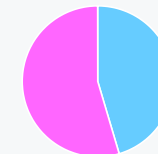
## Alert threshold

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

## Alert management (W20 2021)



## Figure | % sex



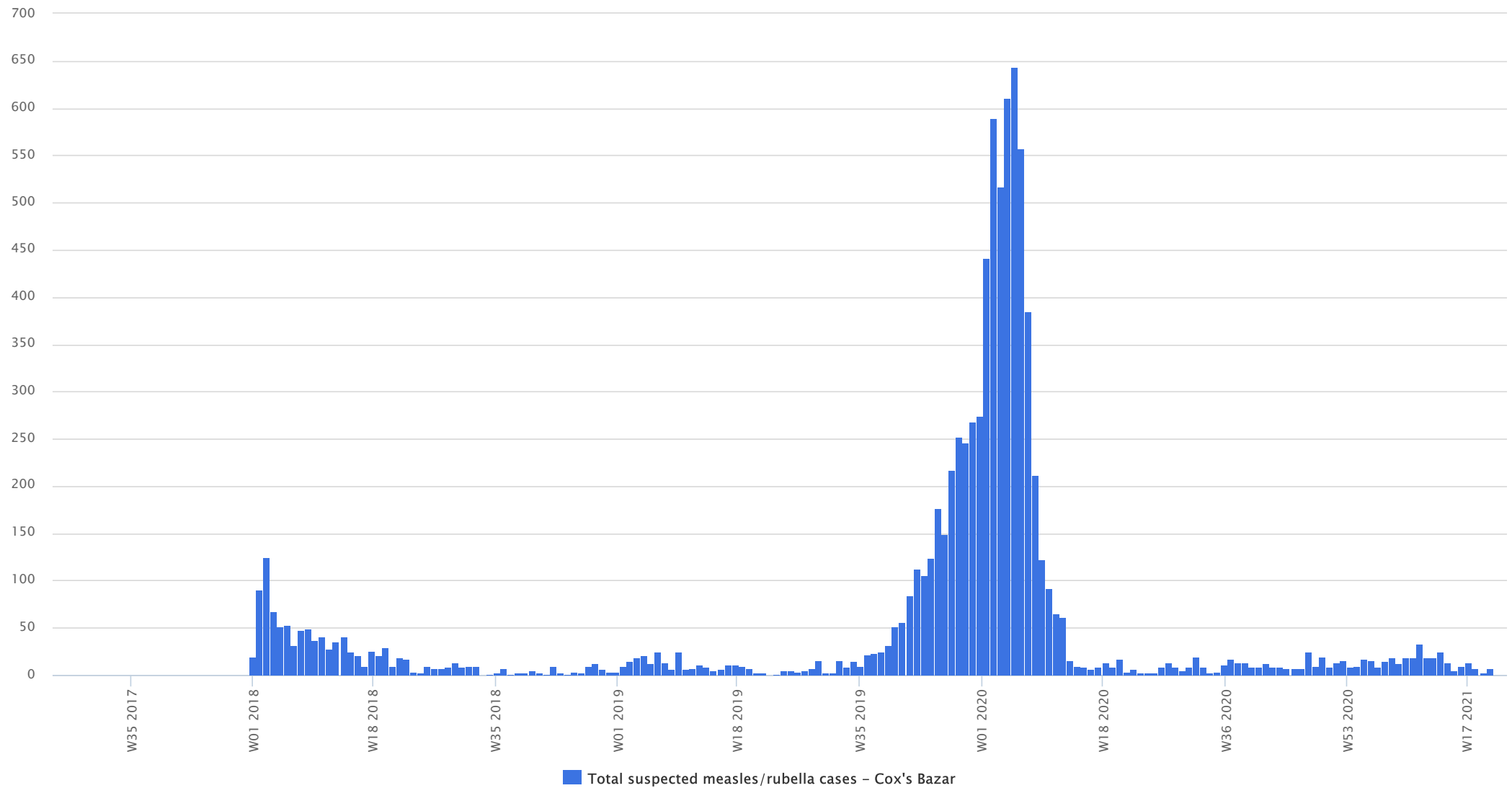
Male Female

## Figure | % age



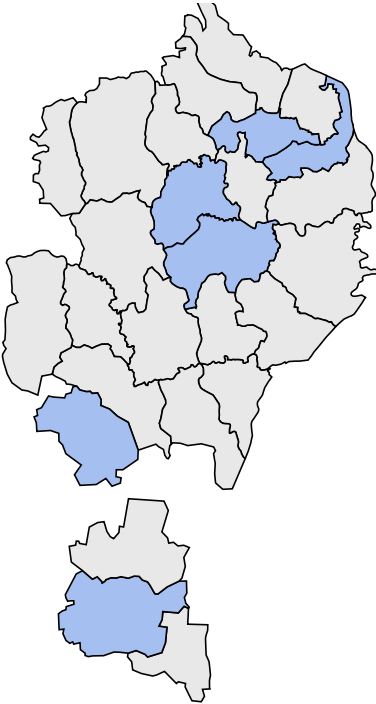
>=5 < 5

**Figure 4** | Trend in number of suspected cases over time (W38 2017 - W20 2021)

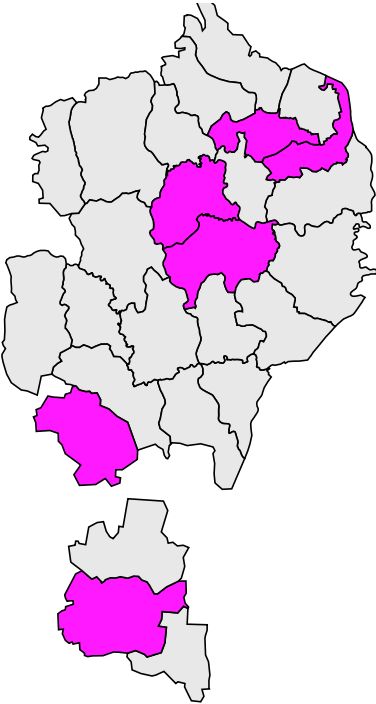


Map 2 | Map of cases by camp (W20 2021)

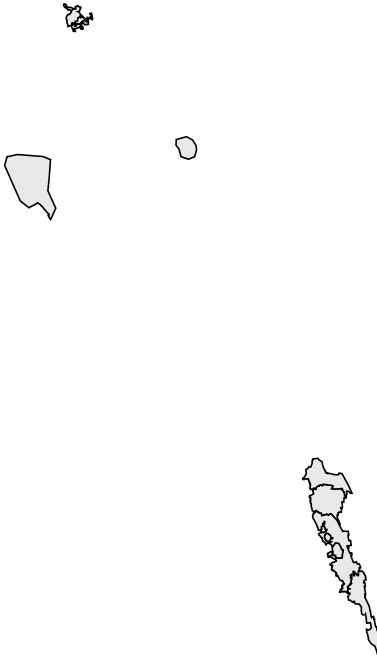
a. Ukhia | Number of cases



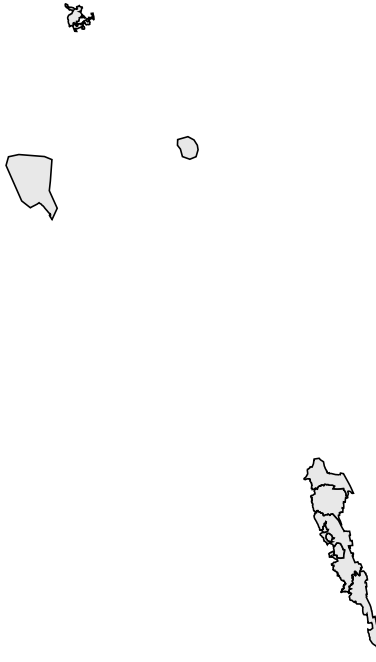
b. Ukhia | Number of alerts



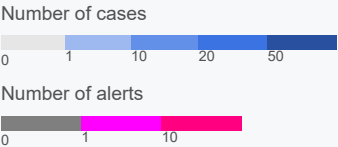
c. Teknaf | Number of cases



d. Teknaf | Number of alerts



Map legend



Alert threshold  
1 case. Source: IEDCR

Alert management (W20 2021)

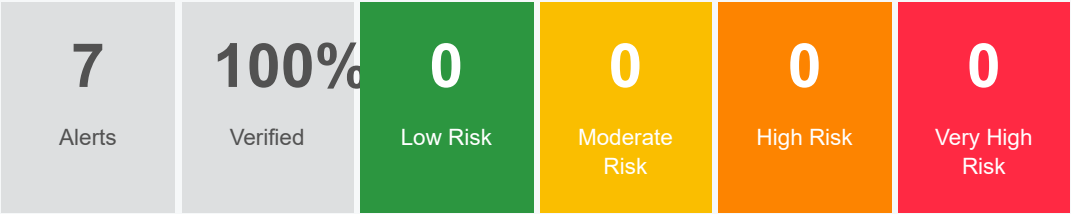


Figure | % sex

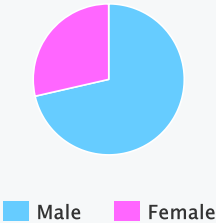
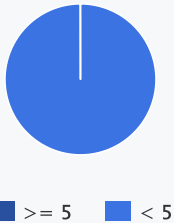
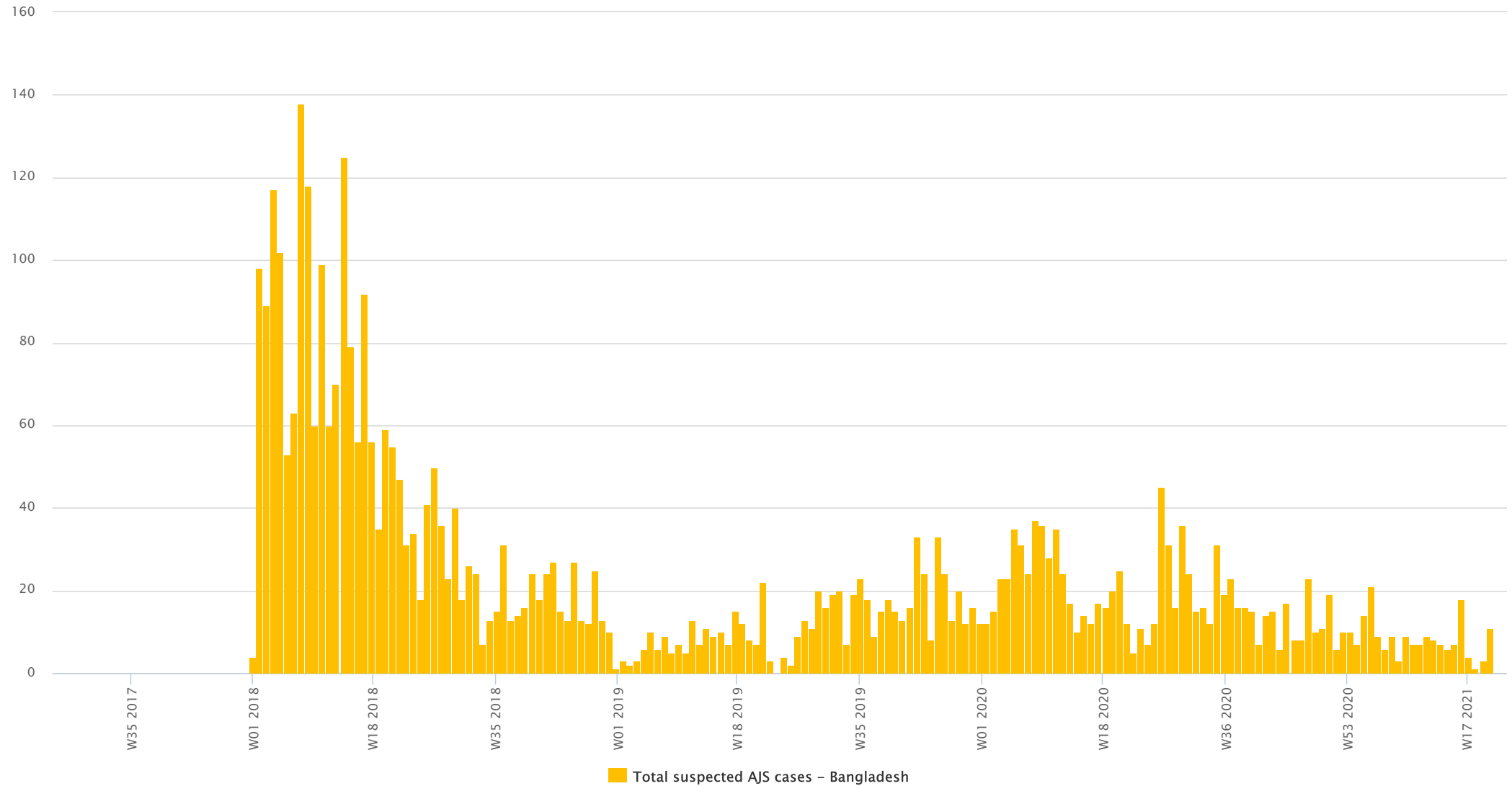


Figure | % age

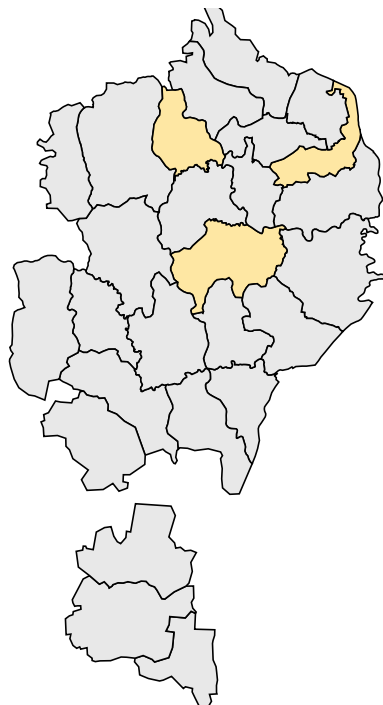


**Figure 5** | Trend in number of cases over time (W38 2017 - W20 2021)

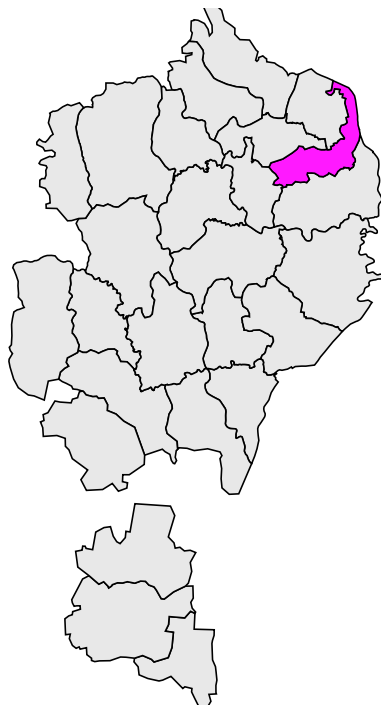


**Map 3 | Map of cases by camp (W37 2017 - W20 2021)**

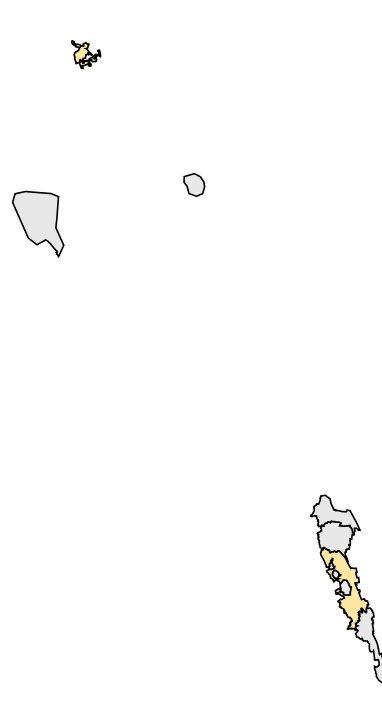
**a. Ukhia | Number of cases**



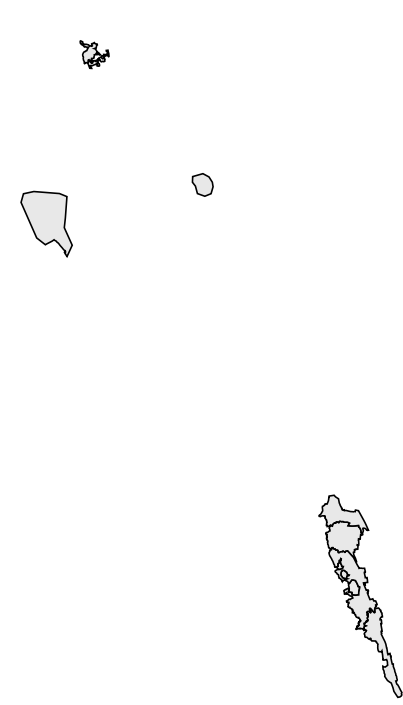
**b. Ukhia | Number of alerts**



**c. Teknaf | Number of cases**



**d. Teknaf | Number of alerts**



## Map legend

Number of cases



Number of alerts



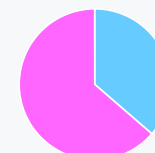
## Alert threshold

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

## Alert management (W20 2021)

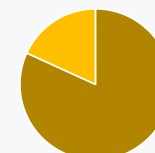


## Figure | % sex



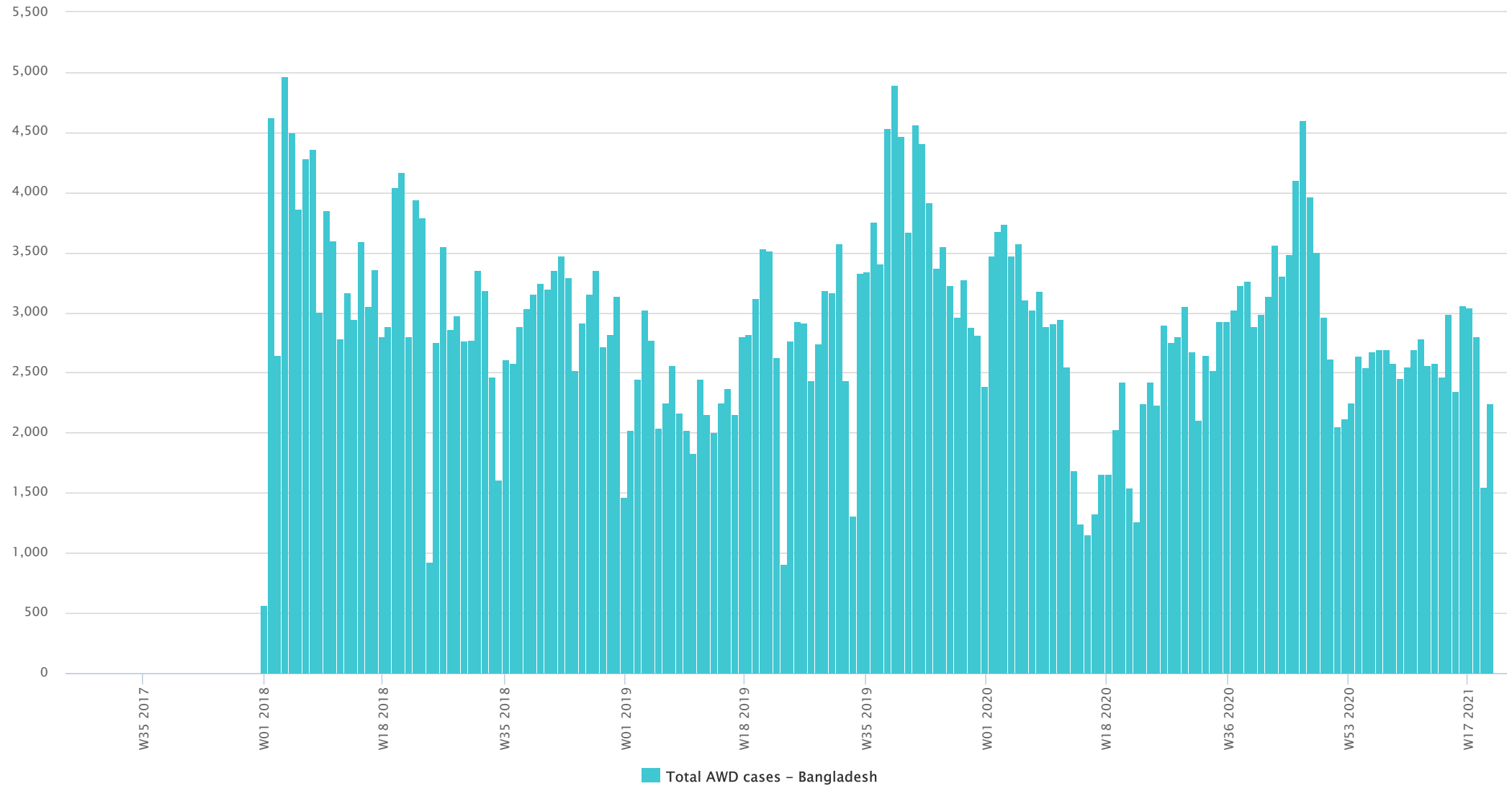
Male Female

## Figure | % age

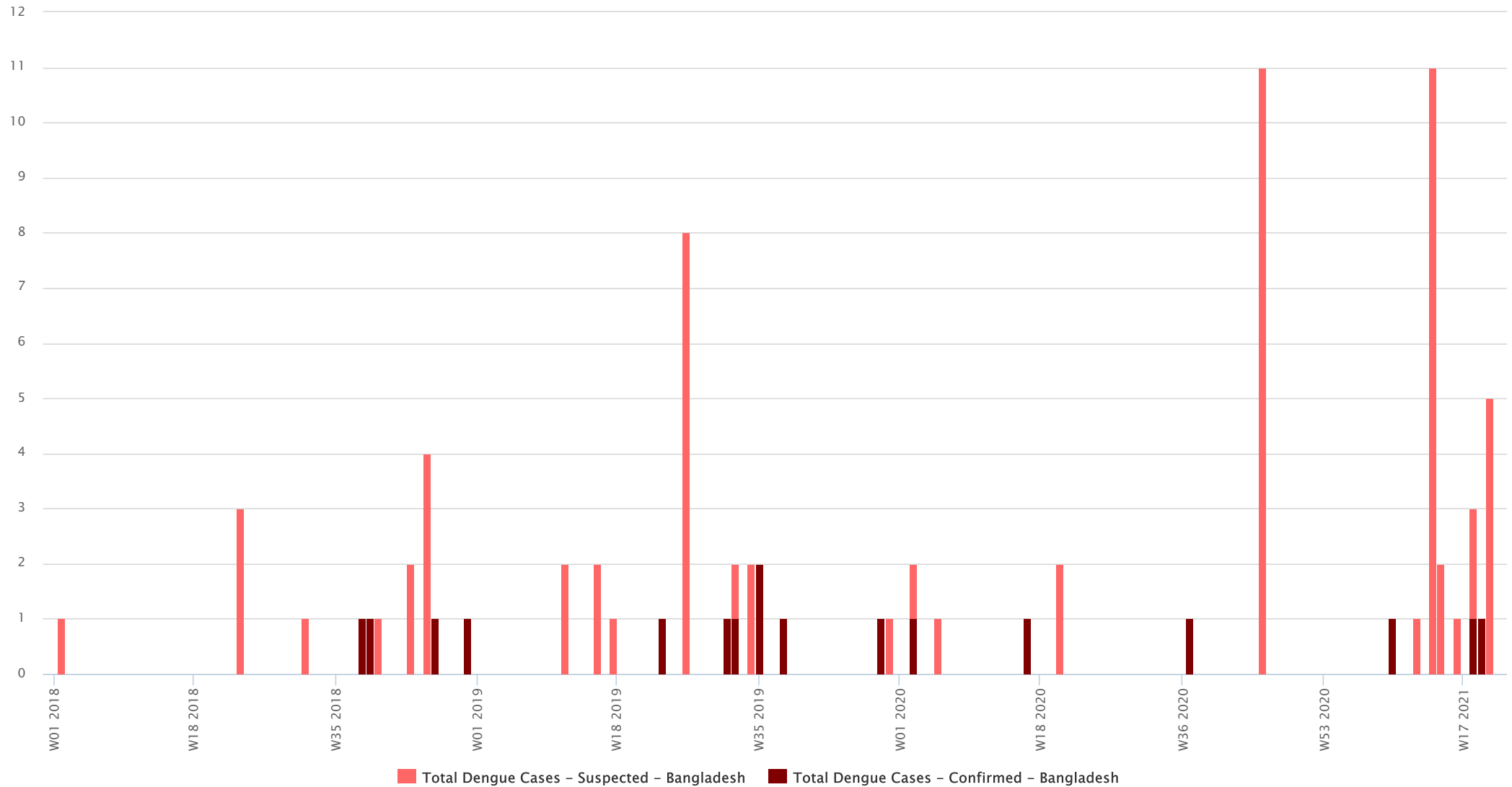


>= 5 < 5

**Figure 6** | Trend in number of cases over time (W38 2017 - W20 2021)



**Figure 7** | Trend in number of cases over time (W38 2017 - W20 2021)





Map 4 | Map of cases by camp (W37 2017 - W20 2021)

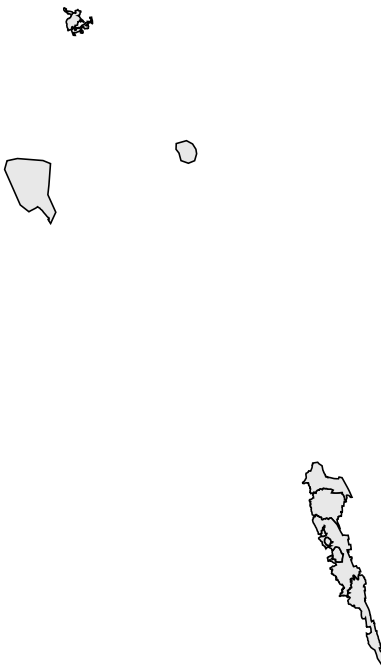
a. Ukhia | Number of cases



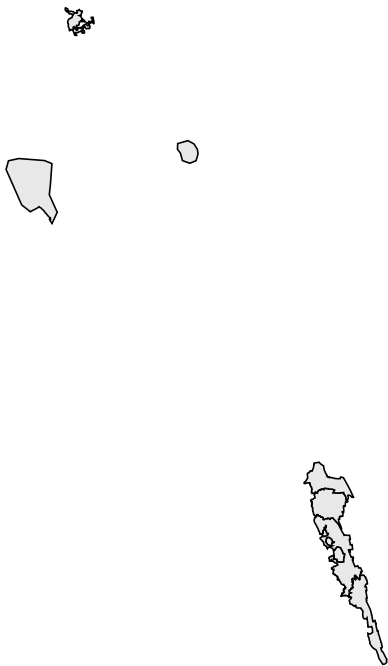
b. Ukhia | Number of alerts



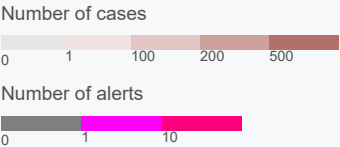
c. Teknaf | Number of cases



d. Teknaf | Number of alerts



Map legend



Alert threshold

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

Alert management (W20 2021)

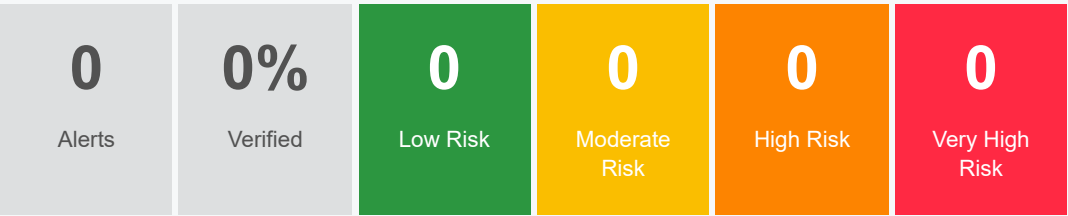


Figure | % sex

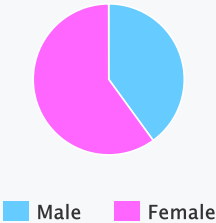


Figure | % age

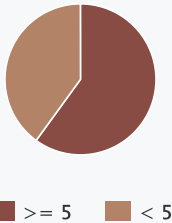
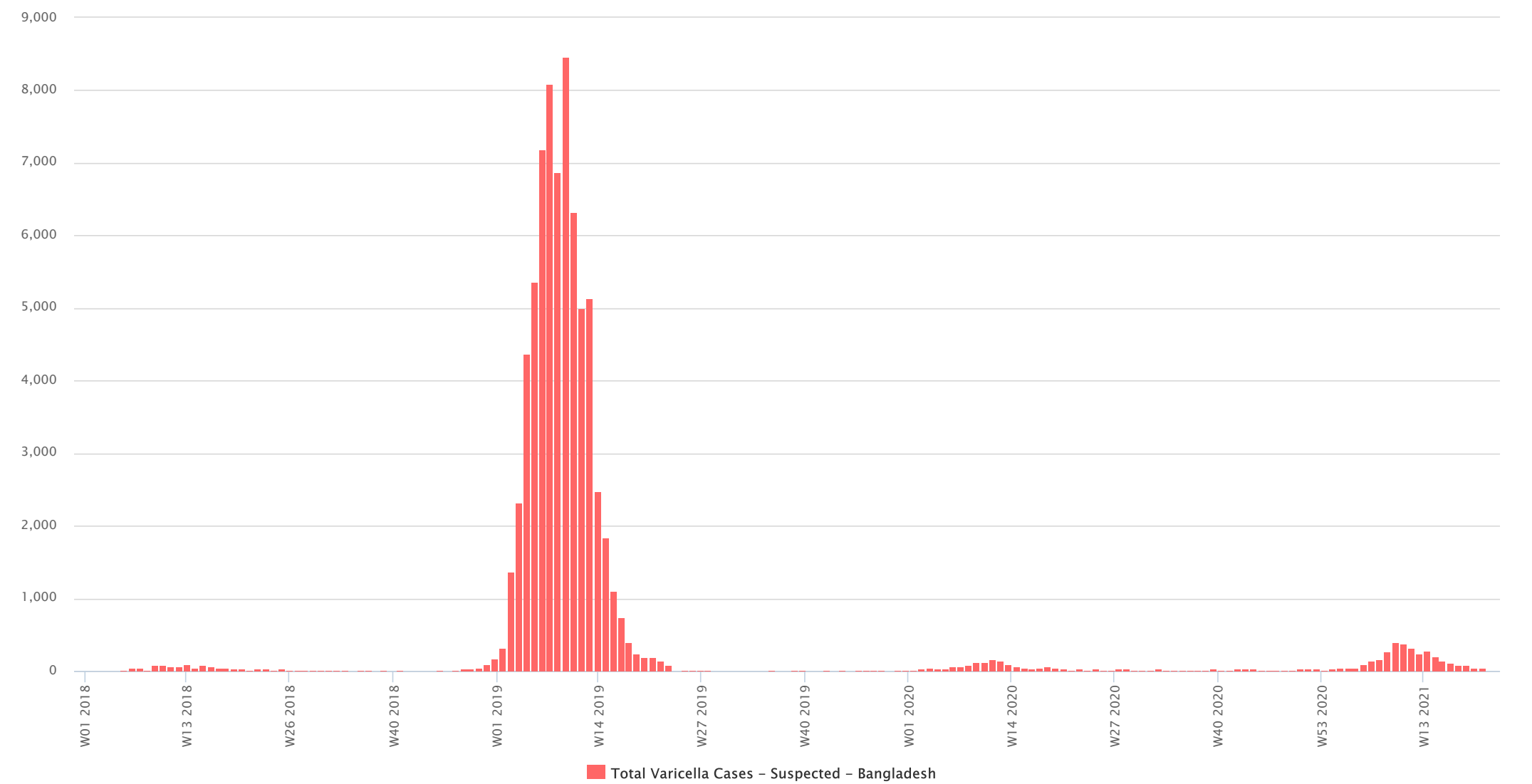
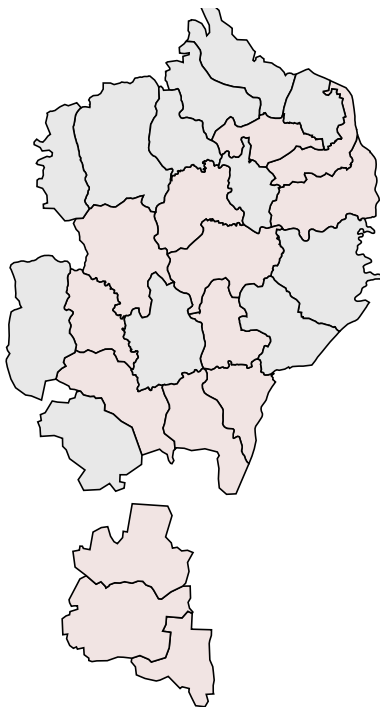


Figure 7 | Trend in number of cases over time (W38 2017 - W20 2021)

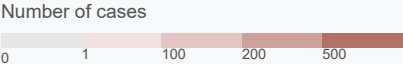


Map 4 | Map of cases by camp (W37 2017 - W20 2021)

a. Ukhia | Number of cases



Map legend



c. Teknaf | Number of cases

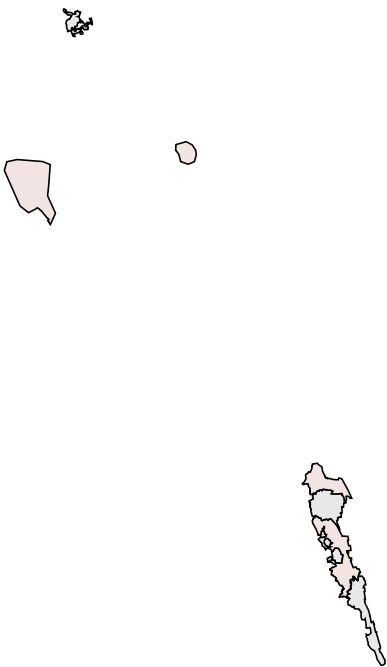


Figure | % sex

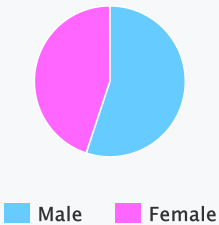
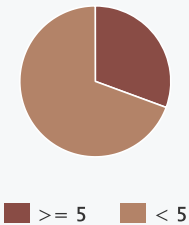


Figure | % age



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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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