

# Epidemiological Highlights

Week 38 (21-27 Sep 2020)



### COVID-19 update among Host Population and FDMN/Rohingya Refugee\* in Cox's Bazar

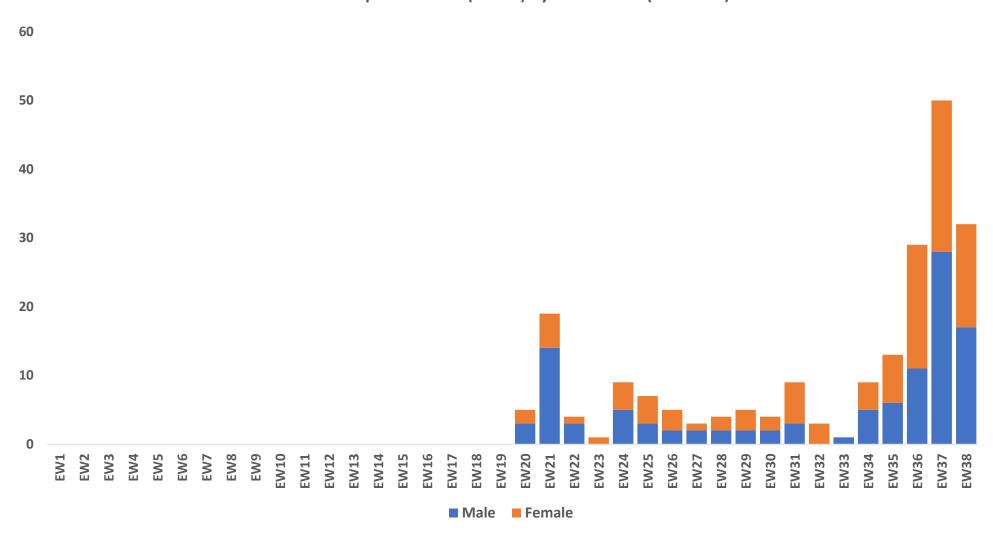
Number of test conducted (in last 24 hours)*	38,831 (570)	FDMN/Rohingya Refugee	Host Population
Number of confirmed case (in last 24 hours)**	4,588 (12)		
Total number of tests conducted (in last 24 ho	8,918 (247)	29,913^ (323)	
Total number of confirmed cases (in last 24 hours)		212 (2)	4,376 (10)
Total number of deaths (in last 24 hours)	8 (0)	68 (0)	
Total number of cases in isolation (in last 24 hours)^^		116 (2)	543 (10)
Total number of cases recovered (in last 24 hours)		88 (0)	3,765 (19)

<sup>\*</sup>The Government of Bangladesh refers to Rohingya as "Forcibly Displaced Myanmar Nationals". The UN system refers to this population as Rohingya refugees, in line with the applicable international framework. In this document both terms are used, as appropriate, to refer to the same population.



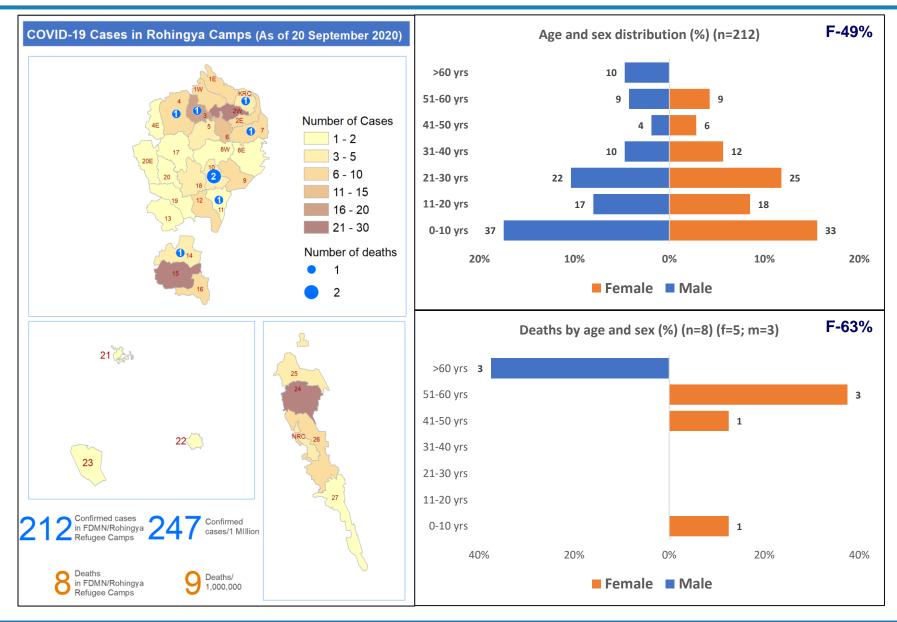


COVID-19 positive cses (n=212) by date of test (Week#38)



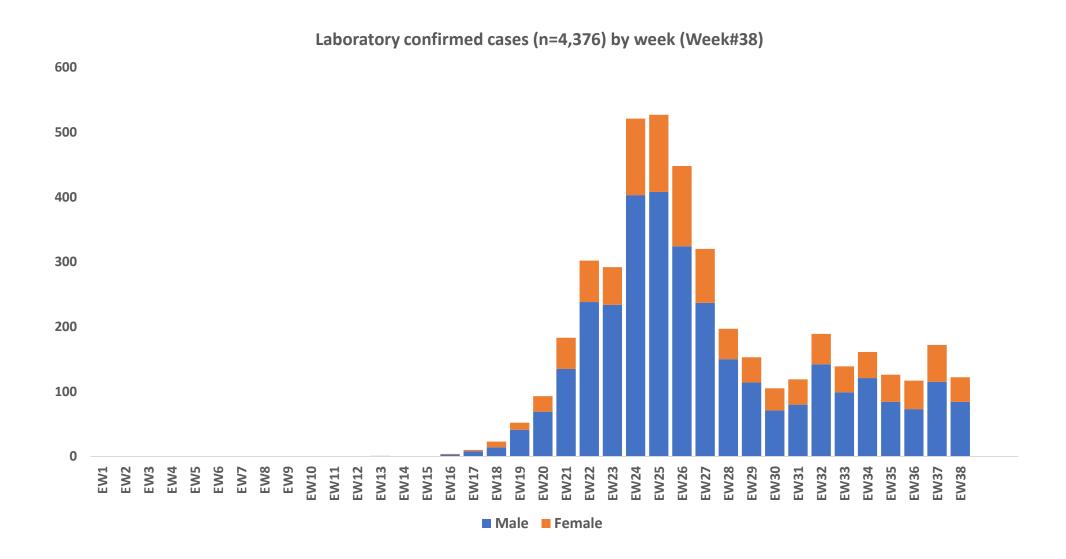






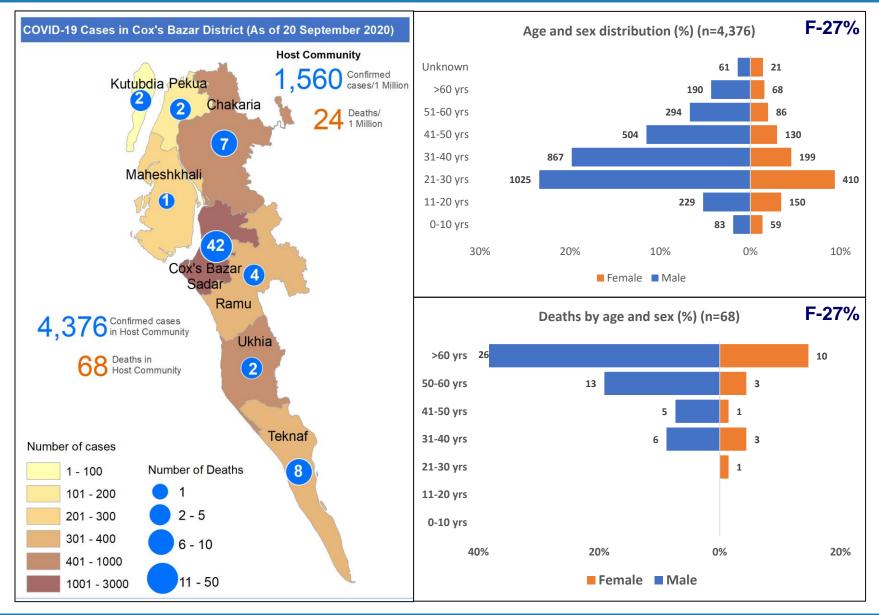








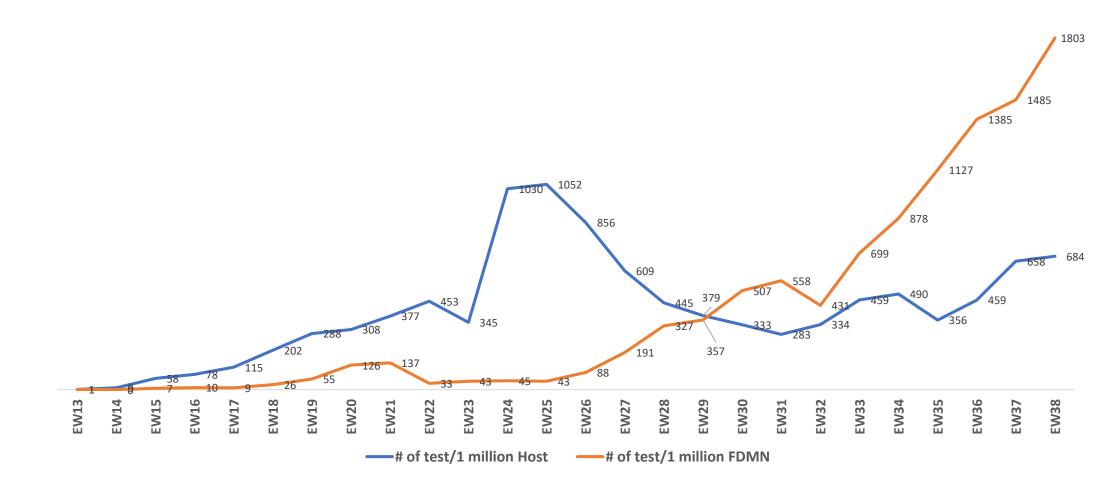








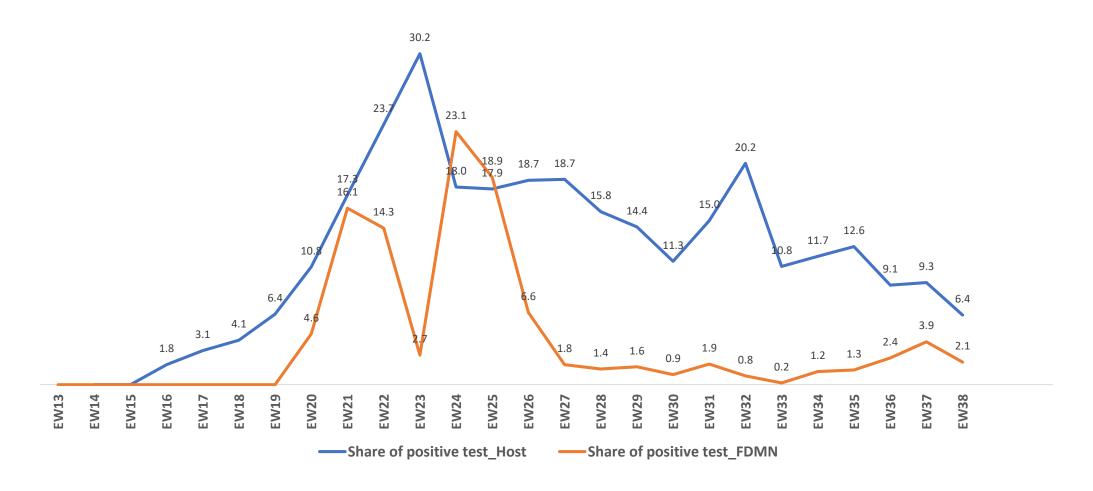
Trends of daily test in Host population (n=29,913) and FDMN/Rohingya Refugees (n=8,918)







Trends of positive tests in FDMN/Rohingya Refugees (212) and Host Population (4,376) in Cox's Bazar







- Acute Respiratory Infection (26.4%), Diarrheal Diseases (5.1%) & Unexplained Fever (2.7%) are the diseases with highest proportional morbidity in week 38.
- Total consultation is showing an increasing trend as well as syndromic condition with similar phenomena.
- Reduction of total consultation number in the camps indicated changes in specific health seeking behavior of refugee population in an earlier phase of the outbreak.
- Community-based mortality surveillance has included SARI death in weekly reporting. Nine (09) SARI death has been reported so far since started in week 27.





# **EWARS Reporting Updates**

- Total 144/166 (87%) health facilities registered in EWARS
- Only 127/144 weekly reports received in week 38.
- Completeness and Timeliness for this week is 85%.
- Total 79 alerts were triggered in week 38.
- All alerts were reviewed and verified by WHO EWARS team which is more than as of previous week (67 in week 37).



# **Diphtheria**

Four suspected diphtheria case reported in go.data in week 38

A total of 9 159 case-patients were reported since 2017 to till date

- Confirmed = 329
- Probable = 2785
- Suspected = 6045

Total Case reported in 2020 = 196

- Confirmed = 11
- Probable = 7
- Suspected = 179

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

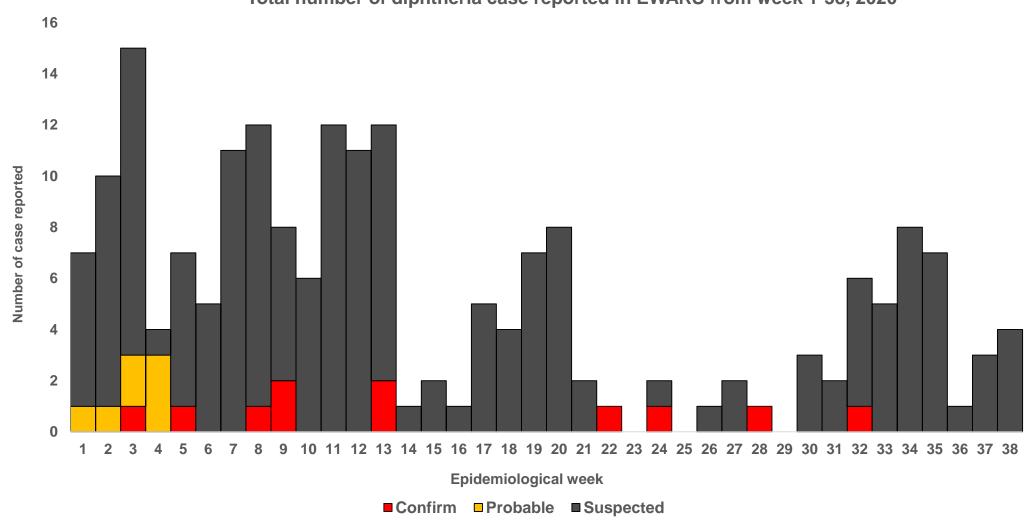
Total deaths reported is 47. Last death was reported on 25 October 2019





# **Diphtheria**

Total number of diphtheria case reported in EWARS from week 1-38, 2020

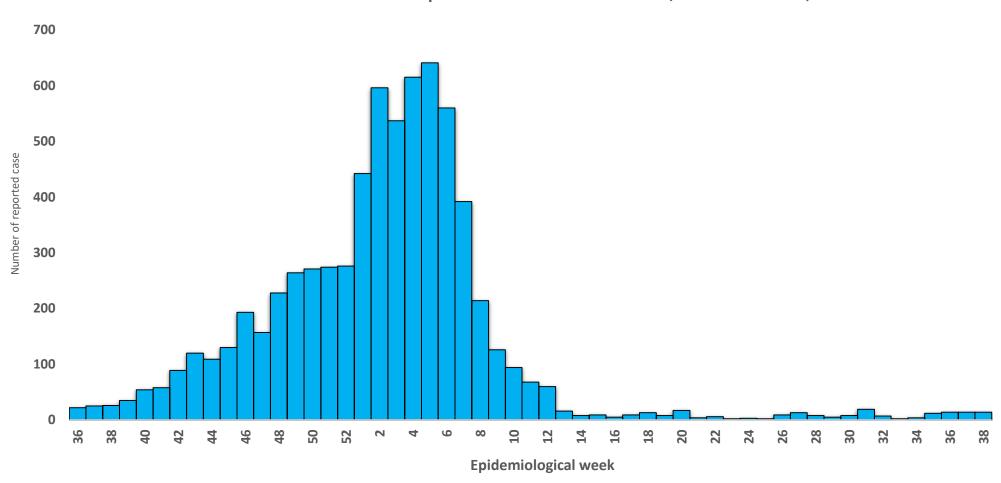






### **Measles**

Total number of Measles case reported in EWARS from week 36, 2019 to week 38, 2020



Total 14 suspected measles cases were reported through aggregated weekly reporting in EWARS in week 38. Out of those, aggregated weekly report showed 4,511 and individual case report (CRF) 2,504 (56%) in 2020.





### **Diarrhoeal Disease**

- A total 4 410 cases of diarrhoeal diseases reported in EWARS in week
  38
- Among which 3030 cases (3.5%) reported as acute watery diarrhoea (AWD), 1026 (1.2%) and 354 (1.2%) cases as other diarrhea and bloody diarrhea respectively.
- Diarrhoeal diseases are the second highest contributor of proportional morbidity after acute respiratory infection (ARI).





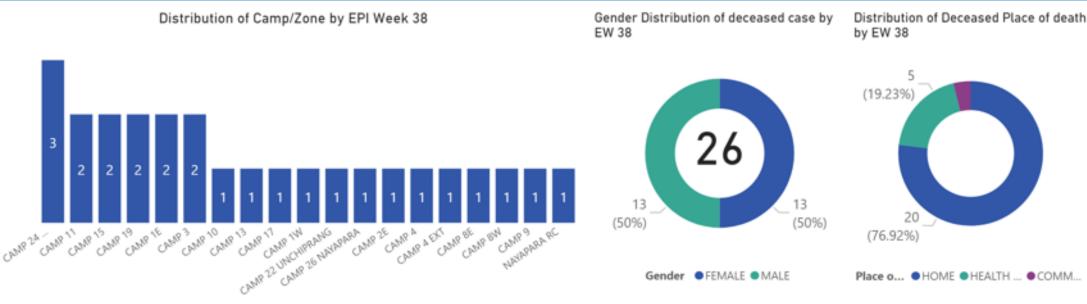
# **Community-based Mortality surveillance**

- In week 38 total of 26 deaths were recorded, 62% (n=16) were due to causes classified as "Others", 15% (n=4) as Still birth (Born Dead), 12% (n=3) as Neonatal (<28 days old) and 8% (n=2) as Infectious Disease.
- There was 1 mortality alert raised for women of reproductive age (12-49 years).
- 19.2% of deaths reported in the health facility, 76.9% of deaths reported in homes and 3.9% of deaths reported from community/Public place.
- Partners to report all mortalities into EWARS using the "Communitybased mortality surveillance" form

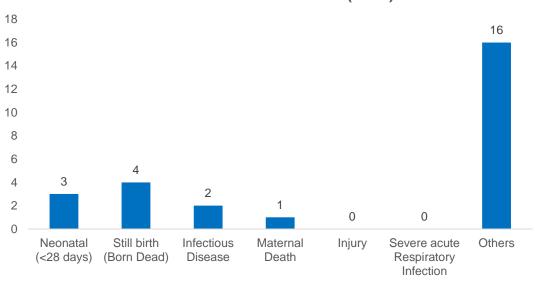




# **Community-based Mortality Surveillance**











# Bangladesh

Rohingya Emergency Response

Early Warning, Alert and Response System (EWARS)

Epidemiological Bulletin W38 2020







#### **Contents**

#### Highlights

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

#### **Early Warning**

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

#### **Alert**

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

#### Sources of data

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





### Highlights W38 2020

Table 1 | Coverage

#	%	
854,704	-	Estimated total Rohingya population <sup>1</sup>
854,704	100%	Total population under surveillance
166	-	Total number of health facilities
144	87%	Number of EWARS reporting sites

Table 2 | Early warning performance indicators

W38	Cumulative (2020)		
127	5234	Number of weekly reports received	
85%	88%	Completeness	
85%	80%	Timeliness	

Table 3 Alert performance indicators

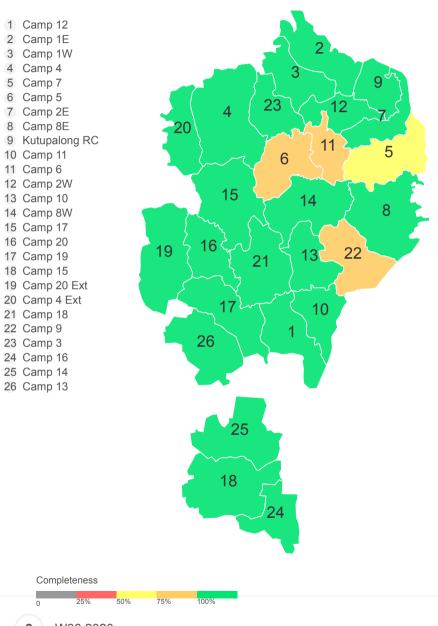
W38	Cumulative (2020)		
79	2,400 Total alerts raised		
100%	100%	% verified	
0%	0%	% auto-discarded	
0%	0%	% undergoing risk assessment	
0%	0%	% completed risk assessment	



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

#### Early Warning | Ukhia and Teknaf

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



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

4

- 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 75%

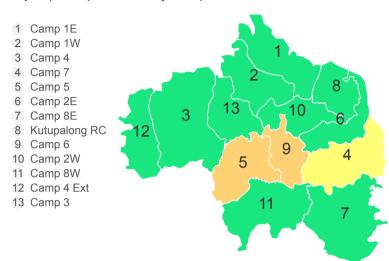




Table 4 | Performance by camp (W38 2020)

Northern group	Reporting		Performance	
	# health facilities	# reports received	Completeness	Timeliness
Camp 1E	4	3	75%	75%
Camp 1W	3	3	100%	100%
Camp 2E	1	1	100%	100%
Camp 2W	2	2	100%	100%
Camp 3	6	5	83%	83%
Camp 4	6	5	80%	80%
Camp 4 Ext	1	1	100%	100%
Camp 5	5	3	60%	60%
Camp 6	2	1	50%	50%
Camp 7	6	2	33%	33%
Camp 8E	7	6	86%	86%
Camp 8W	6	5	83%	83%
Kutupalong RC	1	2	100%	100%

#### Map 2 | Completeness by camp



Completeness





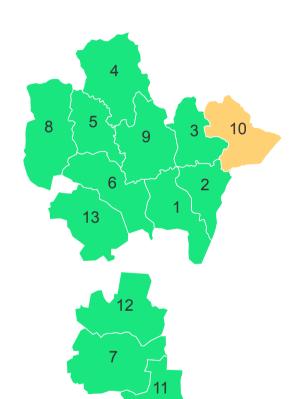


Table 5 | Performance by camp (W38 2020)

Southern group	Reporting		Performance	
	# health facilities	# reports received	Completeness	Timeliness
Camp 10	4	4	100%	100%
Camp 11	9	7	78%	78%
Camp 12	6	6	100%	100%
Camp 13	9	9	100%	100%
Camp 14	6	5	83%	83%
Camp 15	10	9	100%	100%
Camp 16	5	5	100%	100%
Camp 17	5	5	100%	100%
Camp 18	5	5	100%	100%
Camp 19	5	4	80%	80%
Camp 20	3	3	100%	100%
Camp 20 Ext	1	1	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 20 Ext
- 9 Camp 18
- 10 Camp 9
- 11 Camp 16
- 12 Camp 14
- 13 Camp 13



Completeness







### Early Warning | Teknaf

Table 6 | Performance by camp (W38 2020)

Teknaf	Reporting		Performance	
	# health facilities	# reports received	Completeness	Timeliness
Camp 21 Chakmarkul	4	4	100%	100%
Camp 22 Unchiprang	5	2	50%	50%
Camp 23 Shamlapur	4	3	100%	100%
Camp 24 Leda	1	1	100%	100%
Camp 25 Ali Khali	3	3	100%	100%
Camp 26 Nayapara	3	2	67%	67%
Camp 27 Jadimura	1	1	100%	100%
Nayapara RC	0	2	0%	100%

#### Map 4 | Completeness by camp

- 1 Nayapara RC
- 2 Camp 27 Jadimura



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





Completeness 75%





### Early Warning | Partner performance

**Table 7** | Performance by partner (W38 2020)

Partner	Performance		Reporting	
	# sites	# reports received	Completeness	Timeliness
BDRCS	8	8	100%	100%
BRAC	11	11	100%	100%
CARE	4	4	100%	100%
FHM	0	0		
FRNDS	12	0	0%	0%
GK	9	9	100%	100%
HMBDF	1	1	100%	100%
IOM	21	15	71%	71%
IRC	2	2	100%	100%
MSF	9	7	78%	78%
МоН	1	1	100%	100%
Норе	1	0	0%	0%
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	9	100%	100%
TdH	1	1	100%	100%





Table 8 | Performance by camp

Northern group	W38		Cumulative (2020)	
	# alerts	% verif.	# alerts	% verif.
Camp 1E	2	100%	58	100%
Camp 1W	1	100%	43	100%
Camp 2E	1	100%	55	100%
Camp 2W	0	0%	52	100%
Camp 3	5	100%	180	100%
Camp 4	2	100%	144	100%
Camp 4 Ext	1	100%	21	100%
Camp 5	4	100%	130	100%
Camp 6	0	0%	27	100%
Camp 7	0	0%	50	100%
Camp 8E	3	100%	30	100%
Camp 8W	7	100%	110	100%
Kutupalong RC	0	0%	16	100%

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

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

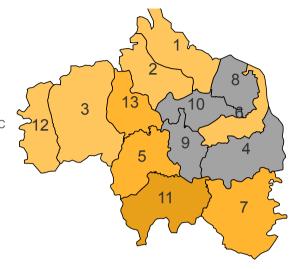




Table 9 | Performance by camp

Southern group	W38		Cumulative (2020)	
	# alerts	% verif.	# alerts	% verif.
Camp 10	5	100%	80	100%
Camp 11	6	100%	103	100%
Camp 12	2	100%	119	100%
Camp 13	4	100%	154	100%
Camp 14	0	0%	70	100%
Camp 15	3	100%	111	100%
Camp 16	7	100%	102	100%
Camp 17	5	100%	73	100%
Camp 18	6	100%	78	100%
Camp 19	3	100%	89	100%
Camp 20	0	0%	53	100%
Camp 20 Ext	0	0%	14	100%
Camp 9	1	100%	101	100%

#### Map 6 | Number of alerts by camp

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

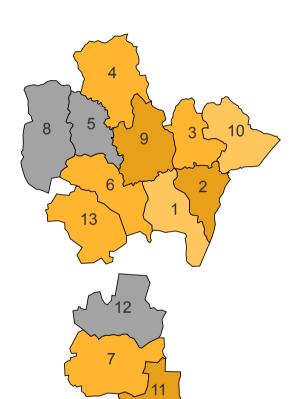








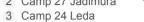


Table 10 | Performance by camp

Teknaf	W38		Cumulative (2020)	
	# alerts	% verif.	# alerts	% verif.
Camp 21 Chakmarkul	4	100%	47	100%
Camp 22 Unchiprang	2	100%	27	100%
Camp 23 Shamlapur	1	100%	45	100%
Camp 24 Leda	0	0%	18	100%
Camp 25 Ali Khali	0	0%	22	100%
Camp 26 Nayapara	0	0%	43	100%
Camp 27 Jadimura	0	0%	15	100%
Nayapara RC	1	100%	25	100%

#### Map 7 | Number of alerts by camp

- 1 Nayapara RC
- 2 Camp 27 Jadimura



- 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	W38		Cumulative (20	20)		
	# alerts	% verif.	# alerts	% verif.		
Indicator-based so	Indicator-based surveillance					
Malaria	0	0%	0	0%		
Measles	7	100%	758	100%		
Bloody Diarr.	0	0%	0	0%		
AFP	2	100%	11	100%		
Meningitis	1	100%	14	100%		
Haem. fever (susp.)	0	0%	9	100%		
NNT	0	0%	2	100%		
Unexp. fever	13	100%	200	100%		
AWD	9	100%	245	100%		
ARI	19	100%	256	100%		
AJS	2	100%	102	100%		
Varicella (Susp.)	0	0%	12	100%		
Suspected COVID-19	0	0%	0	0%		
Event-based surveillance						
EBS total	1	100%	168	100%		

Table 12 | Risk assessment

W38	3	Cumulative (2020)	
0		2	Low risk
0		0	Moderate risk
0		0	High risk
0		0	Very high risk





# For more help and support, please contact:

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

Telephone: +88 01723350483

Email: bshownam49@gmail.com

Dr. 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 <a href="http://ewars-project.org">http://ewars-project.org</a>

Sign up for an account with EMADS Bangladeah at http://bd.augara.u









# Bangladesh

Rohingya Emergency Response

Early Warning, Alert and Response System (EWARS)

Annex W38 2020







### **Proportional morbidity**

Figure 1 | Proportional morbidity (W38 2020)

0.0%

- Acute Respiratory Infection (ARI)
- Acute Watery Diarrhoea
- Bloody diarrhoea
- Other diarrhoea
- Varicella (susp.)

- Unexplained fever
- Acute Jaundice Syndrome (AJS)
- Measles/Rubella
- Other
- Vector-borne disease\*

<sup>\*</sup> Combines malaria and dengue cases (suspected and confirmed)

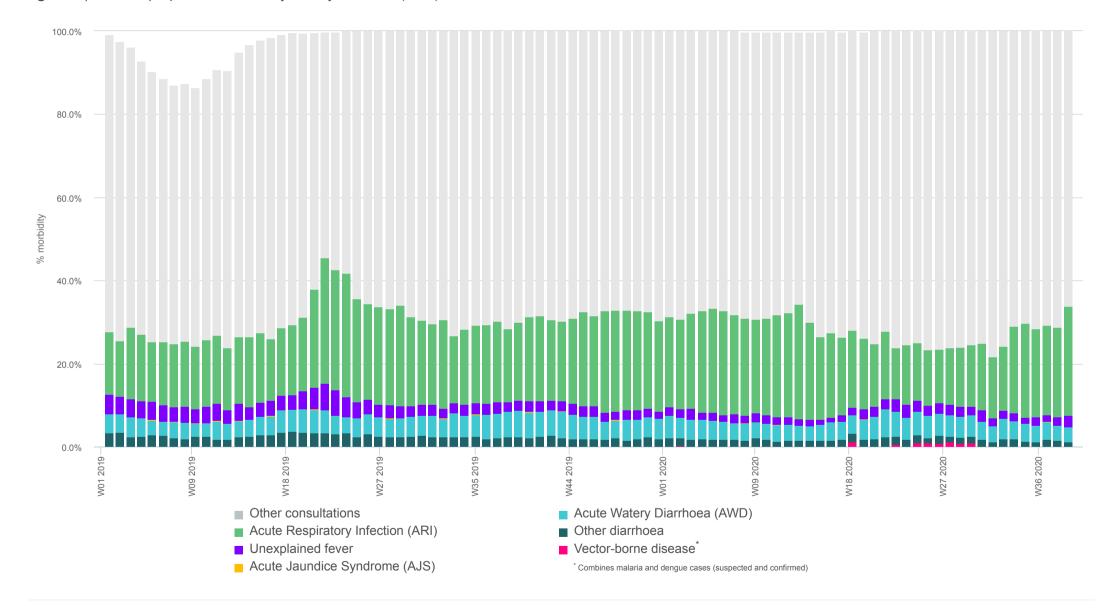
Disease	W38		2020	
	# cases	% morbidity	# cases	% morbidity
AWD	3,030	3.5%	94,293	4.5%
Bloody diarr.	354	0.4%	11,681	0.6%
Other diarr.	1,026	1.2%	34,507	1.6%
Susp. Varicella	21	0.0%	1,651	0.1%
ARI	22,602	26.4%	431,815	20.6%
Measles/Rub.	14	0.0%	4,511	0.2%
AFP	1	0.0%	10	0.0%
Susp. menin.	3	0.0%	52	0.0%
AJS	16	0.0%	855	0.0%
Susp. HF	0	0.0%	21	0.0%
Neo. tetanus	0	0.0%	1	0.0%
Adult tetanus	0	0.0%	2	0.0%
Malaria (conf.)	0	0.0%	7	0.0%
Malaria (susp.)	38	0.0%	3,501	0.2%
Dengue (conf.)	0	0.0%	2	0.0%
Dengue (susp.)	0	0.0%	4	0.0%
Unexpl. fever	2,289	2.7%	43,093	2.1%
Sev. Malnut.	39	0.0%	878	0.0%
Inj./Wounds	1,560	1.8%	55,456	2.6%
Other	54,585	63.8%	1,417,059	67.5%
Total	83,306	100%	2,100,095	100%





### Trend in consultations and key diseases

Figure 2 | Trend in proportional morbidity for key diseases (W38)

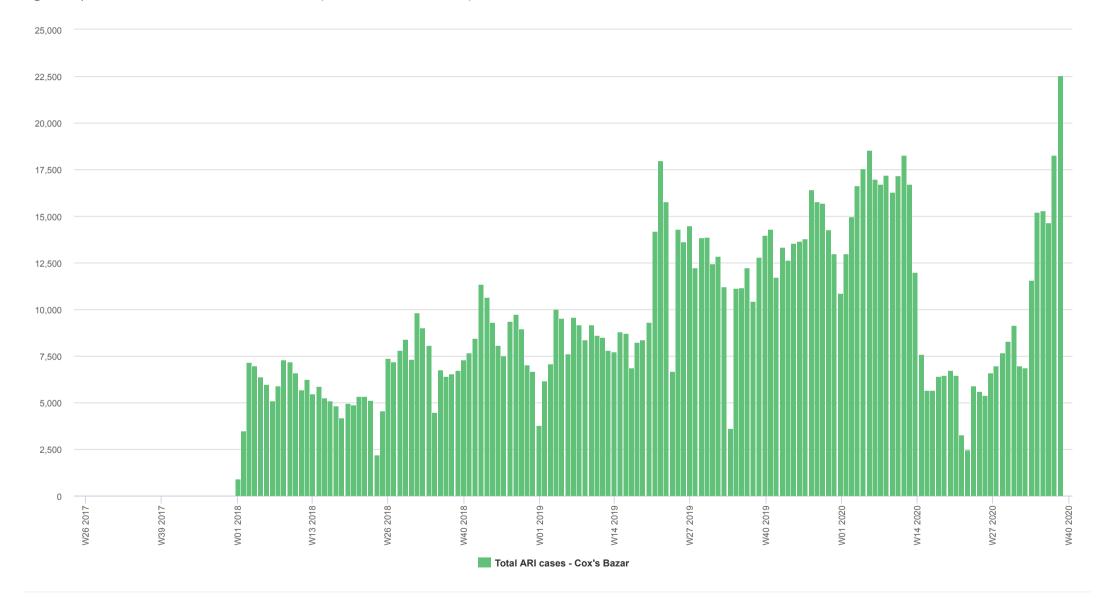






### Acute Respiratory Infection | Trend

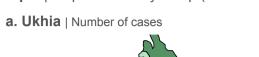
Figure 3 | Trend in number of cases over time (W38 2017 - W38 2020)

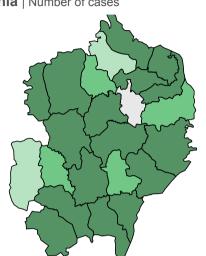






#### **Map 1** | Map of cases by camp (W38 2020)





b. Ukhia | Number of alerts



c. Teknaf | Number of cases





d. Teknaf | Number of alerts









### Alert management (W38 2020)



Map legend

Alert threshold Twice the average number of cases

over the past 3 weeks. Source: IEDCR

0 Alerts

0% Verified

0 Low Risk 0

0

Very High Risk



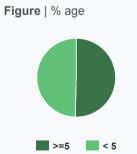
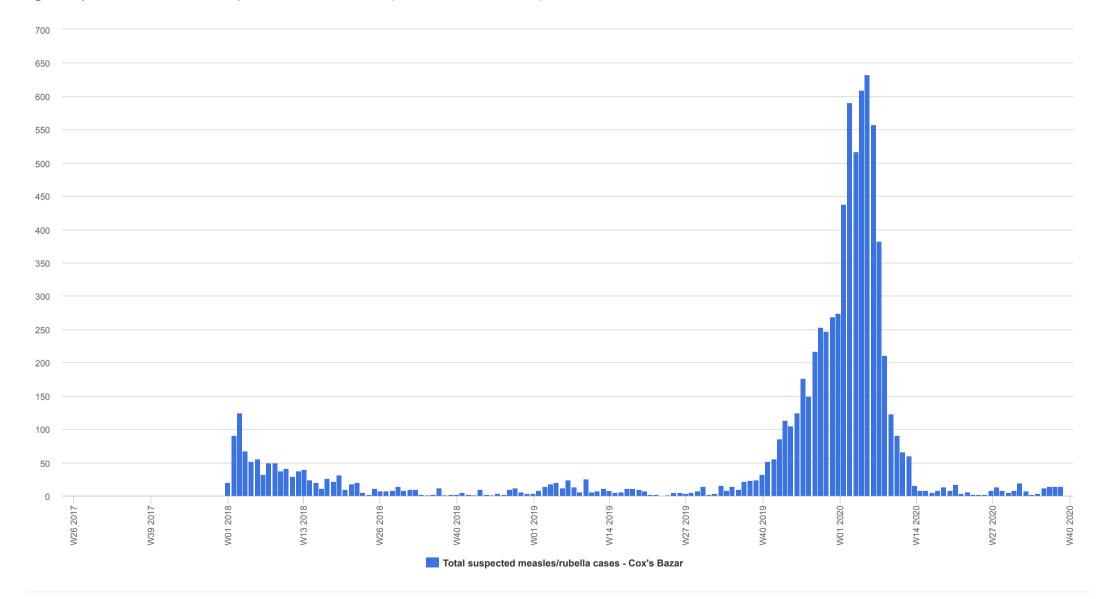




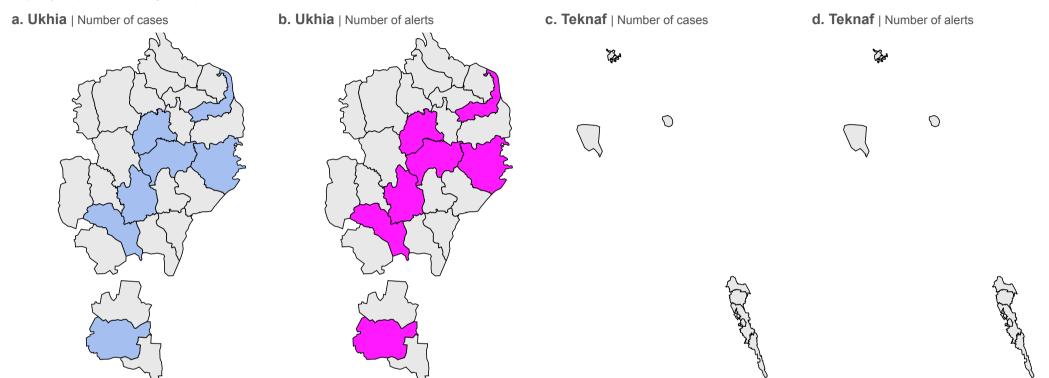
Figure 4 | Trend in number of suspected cases over time (W38 2017 - W38 2020)

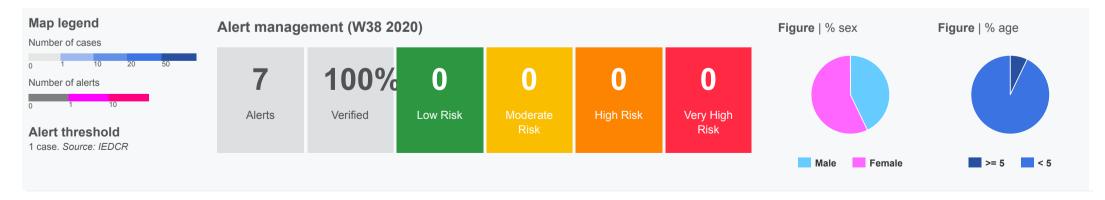






#### **Map 2** | Map of cases by camp (W38 2020)



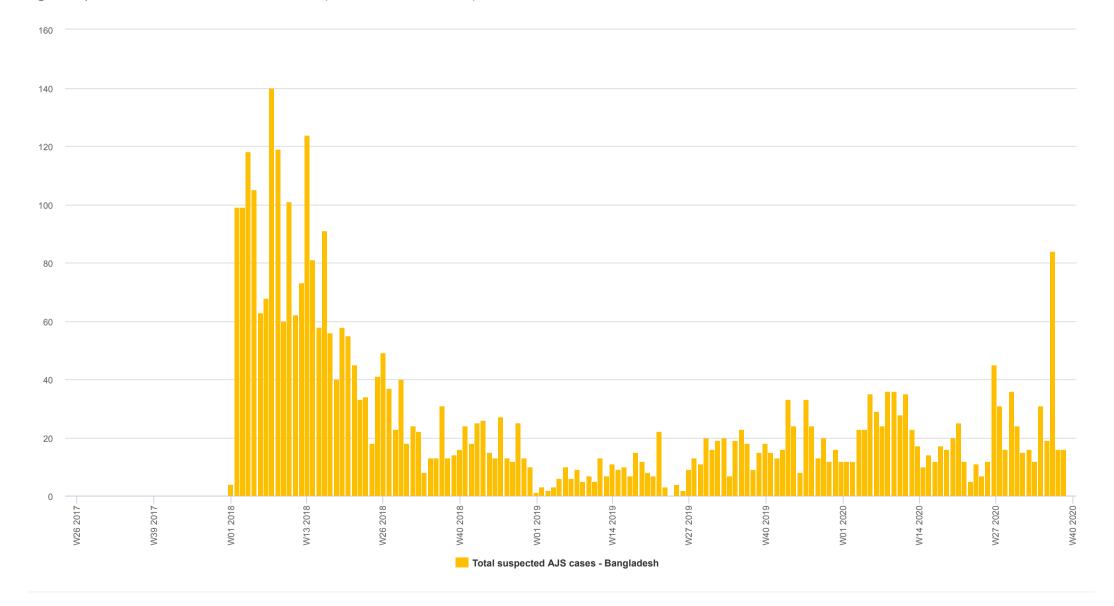






### Acute Jaundice Syndrome | Trend

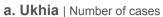
Figure 5 | Trend in number of cases over time (W38 2017 - W38 2020)





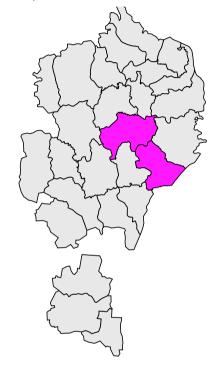


#### Map 3 | Map of cases by camp (W37 2017 - W38 2020)





b. Ukhia | Number of alerts



c. Teknaf | Number of cases





O

d. Teknaf | Number of alerts





O





### 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 (W38 2020)

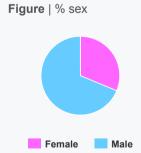


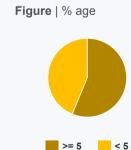
100% Verified Low Risk

0

0

Very High Risk







### Acute Watery Diarrhoea | Trends

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

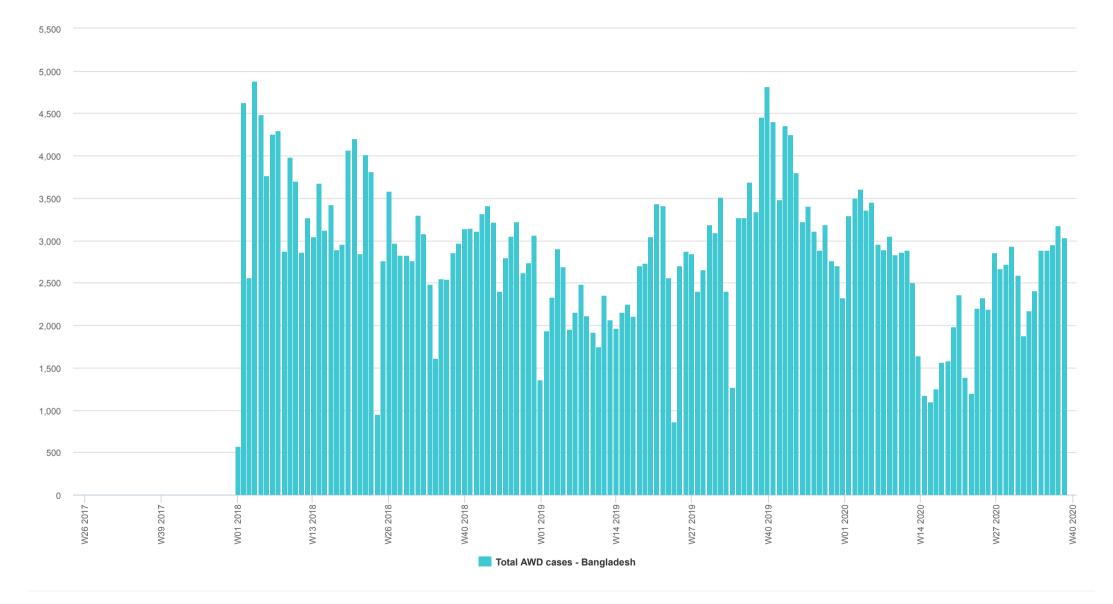
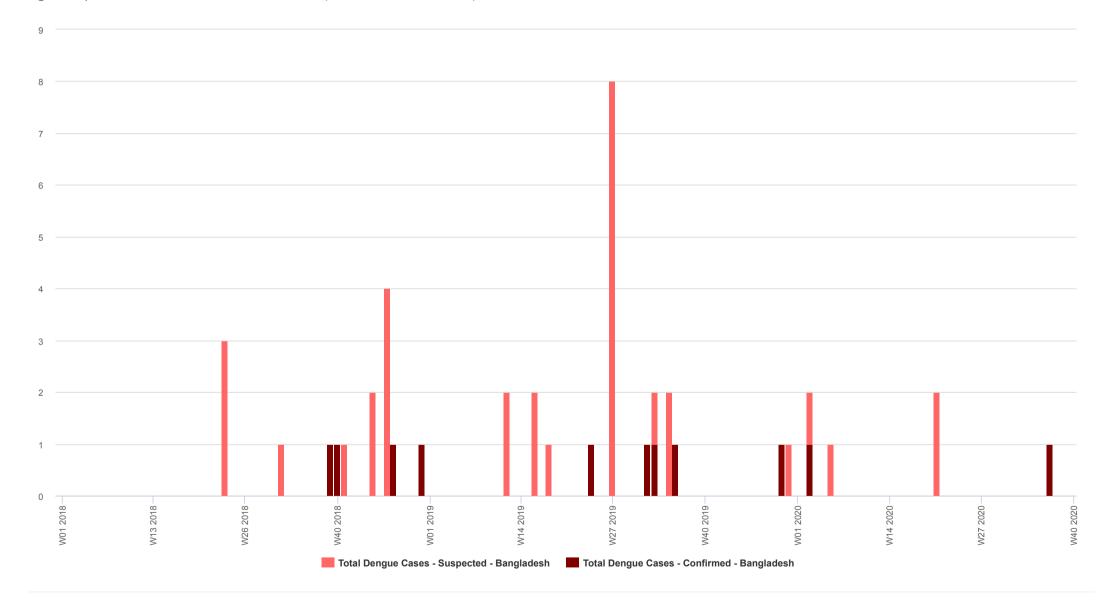






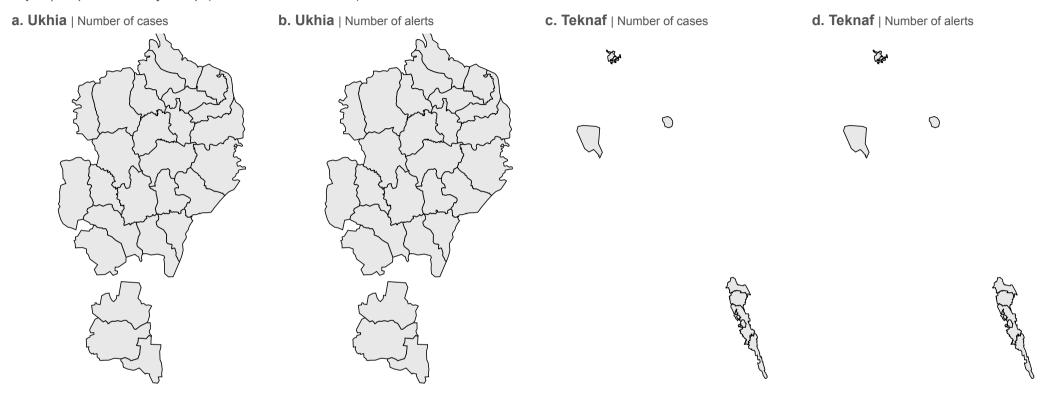
Figure 7 | Trend in number of cases over time (W38 2017 - W38 2020)

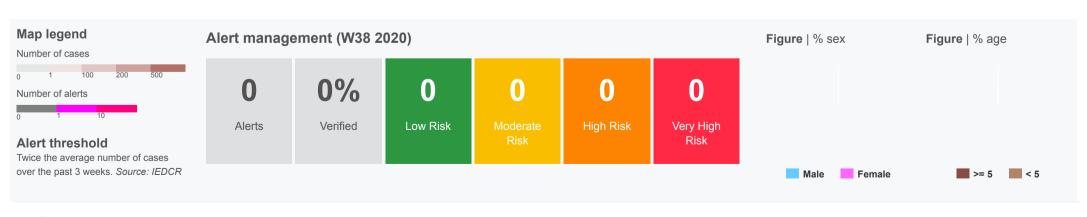






#### Map 4 | Map of cases by camp (W37 2017 - W38 2020)



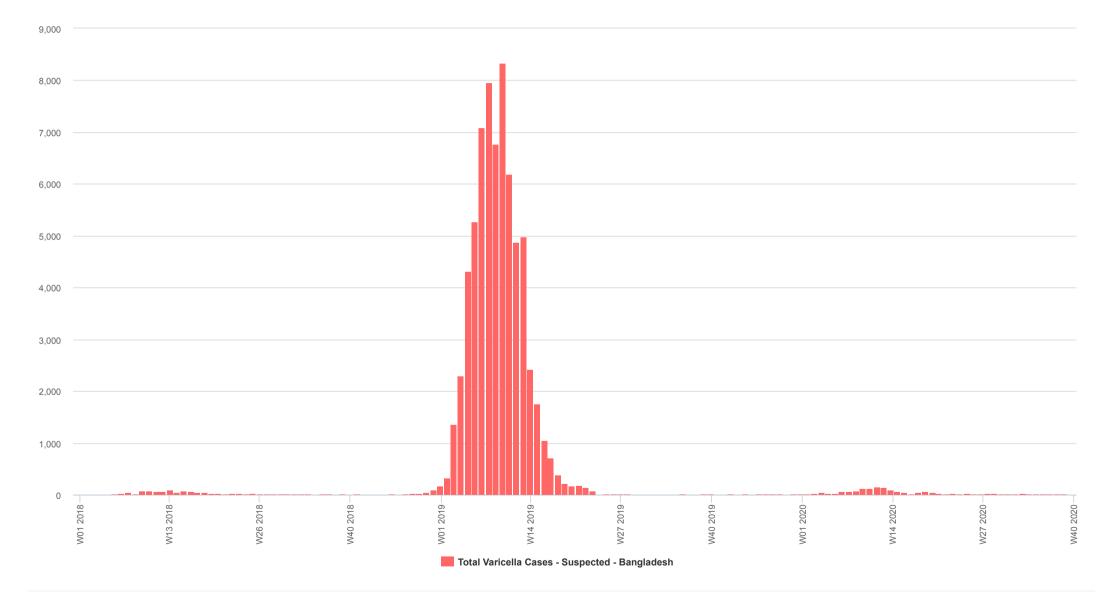






### Varicella (Susp.) | Trends

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



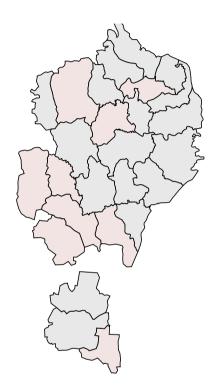




### Varicella (Susp.) | Maps

Map 4 | Map of cases by camp (W37 2017 - W38 2020)

a. Ukhia | Number of cases



c. Teknaf | Number of cases





O







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 <a href="http://ewars-project.org">http://ewars-project.org</a>

Sign up for an account with EMADS Bangladach at http://hd awara.w







