



Epidemiological Highlights

Week 51 (17-23 December) 2023



Currently, a total of **135 health facilities** are registered in EWARS

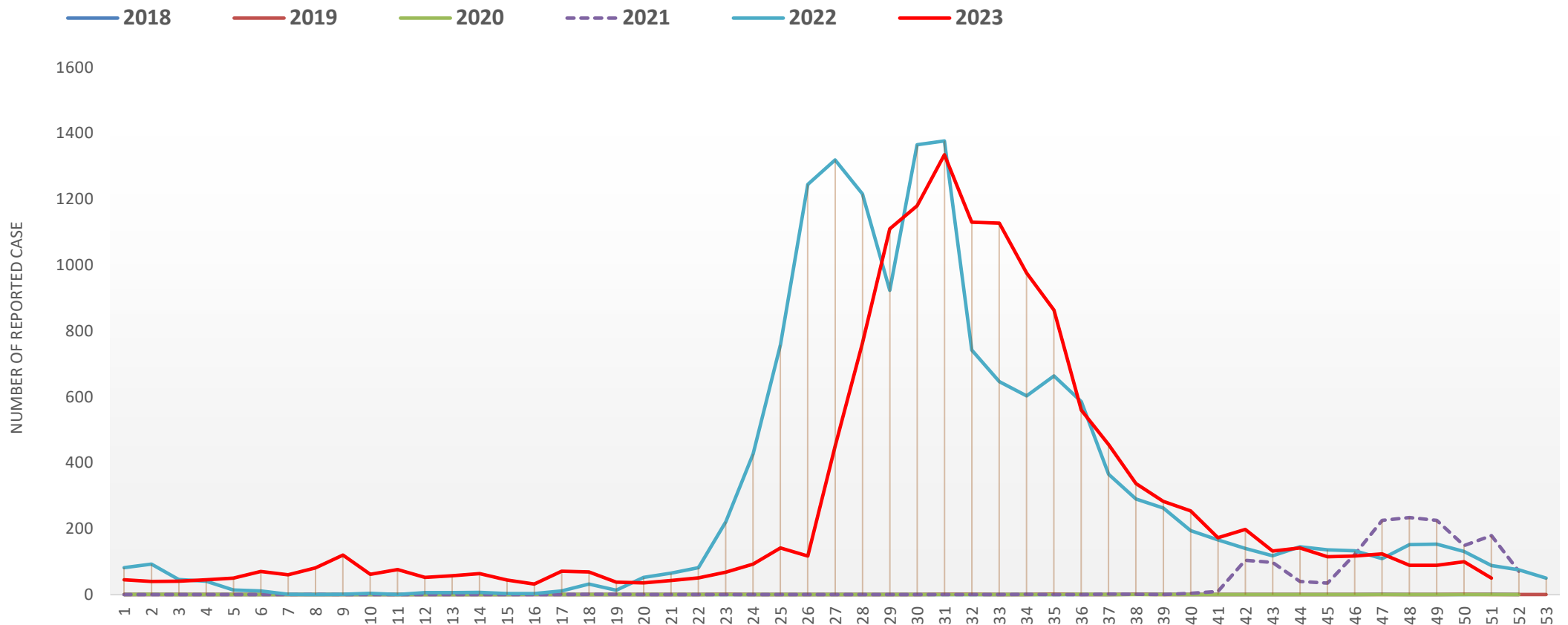
- A total of 121 out of 135 registered health facilities submitted weekly report on time this week
- Timeliness and completeness of weekly reporting were 90% which is above the global and national weekly threshold
- Seventy-six (76) alerts were triggered ; this is a 63% increase from the previous week (47 alerts in week 50, 2023)
- All alerts were reviewed and verified by the WHO EWARS team

Weekly Proportionate Morbidity and SARI Mortality among the Rohingya Refugee population from 2020-Epi 1-51

- Acute Respiratory Infections (21.8%), Acute Watery Diarrhoea (4.1%), and Injury and wounds (2.9%) were the diseases and health conditions with the highest proportionate morbidity this week.
- Monitoring of suspected SARI deaths under enhanced Community-based mortality surveillance has been continued since week 28, 2020. So far, 45 cases of which none is probable COVID-19 Death, have been reported in 2023
- This Epi week, two (2) new SARI death was reported, investigated, and none met criteria for reclassification as probable COVID-19 death was required

Year	Suspected SARI death reported (current week)	Reclassification as probable COVID-19 death
2023	45 (2)	0
2022	136	8
2021	96	15
2020	49	2

Weekly trends of confirmed Dengue cases among Rohingya Refugees and host population in Cox's Bazar from 2018 to Epi Week 51, 2023

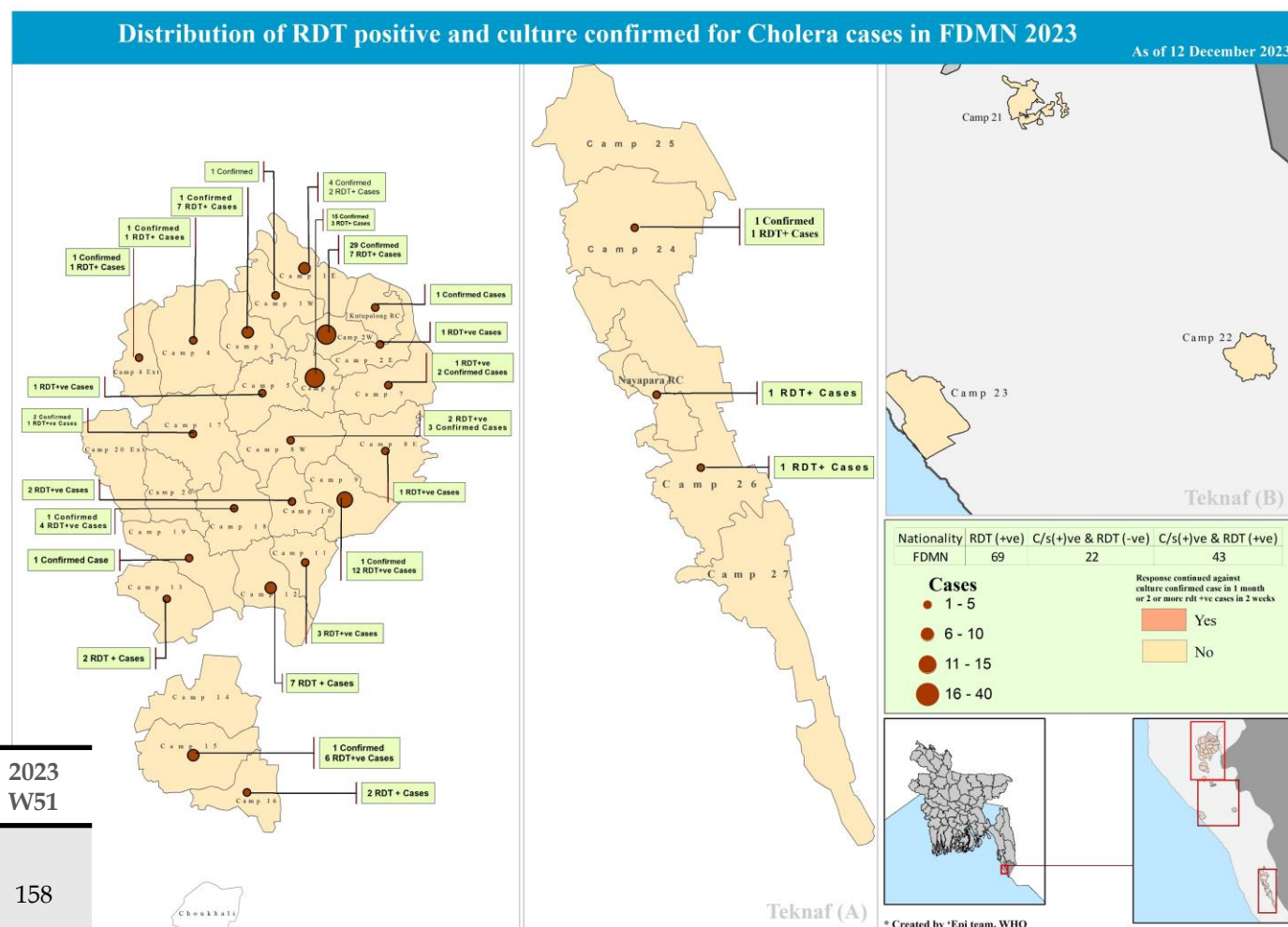


- ❑ Weekly trends of dengue fever cases continue to decline since peaking in Epi week 31 (the current surge began in Epi 26 2023)
- ❑ This week, 50 confirmed dengue cases were reported, a 50% decrease from the previous week
- ❑ A cumulative of 13,834 confirmed dengue cases including 18 deaths (CFR 0.1%) have so far been reported in 2023
- ❑ The current transmission is a continuation of that for 2021 and 2022 (possible endemic transmission established)

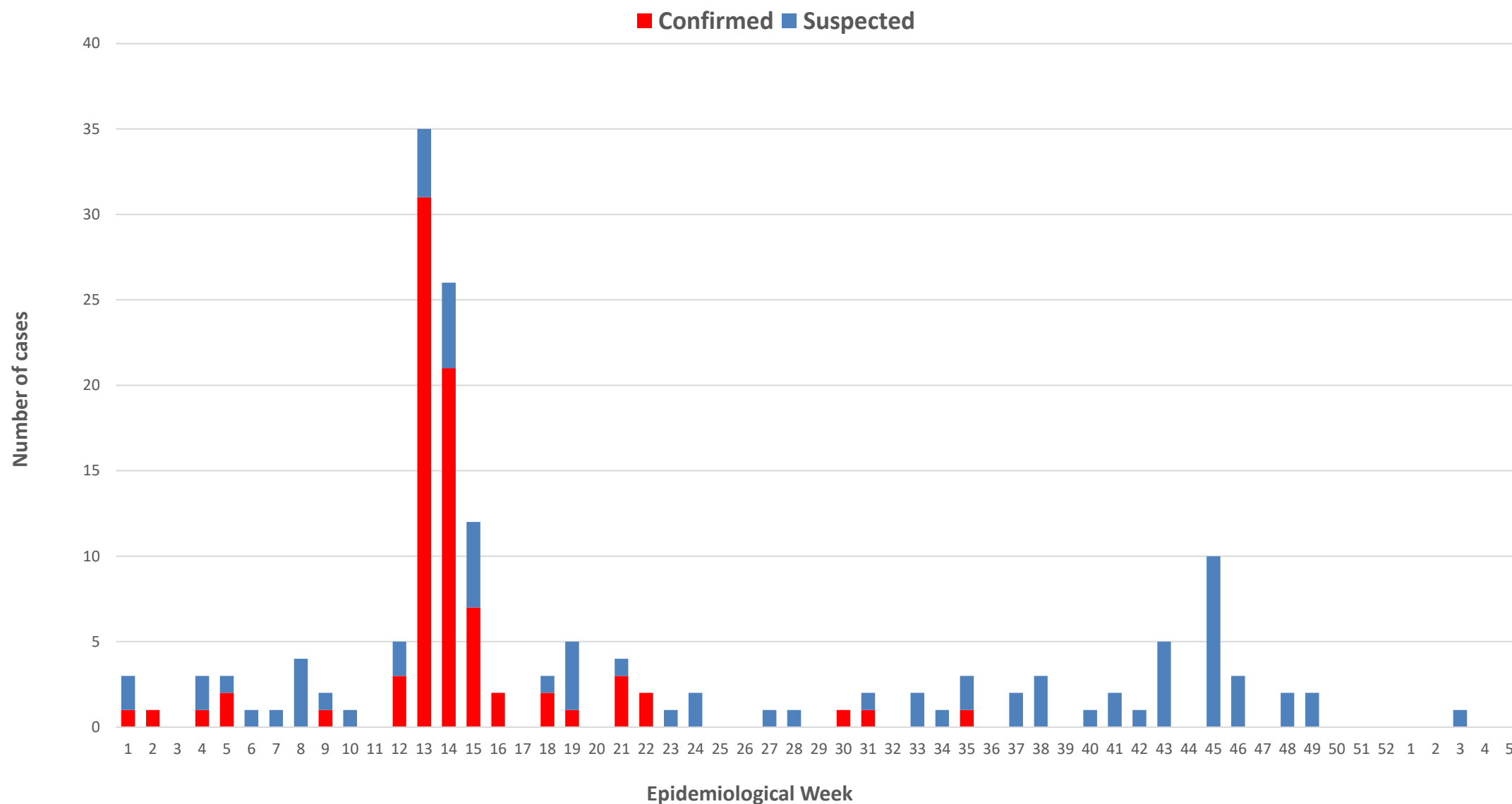
Cholera/AWD Surveillance Updates

- In this week, no new cholera cases were reported
- A total of 158 cases of which 77 RDT-positive AWD/cholera suspected cases and 81 culture-confirmed Cholera cases have so far been reported in (Epi week 1-51) 2023.
- Cumulatively there are 1020 RDT AWD cases/Cholera suspects reported while 483 cases were culture-confirmed since transmission in 2018.

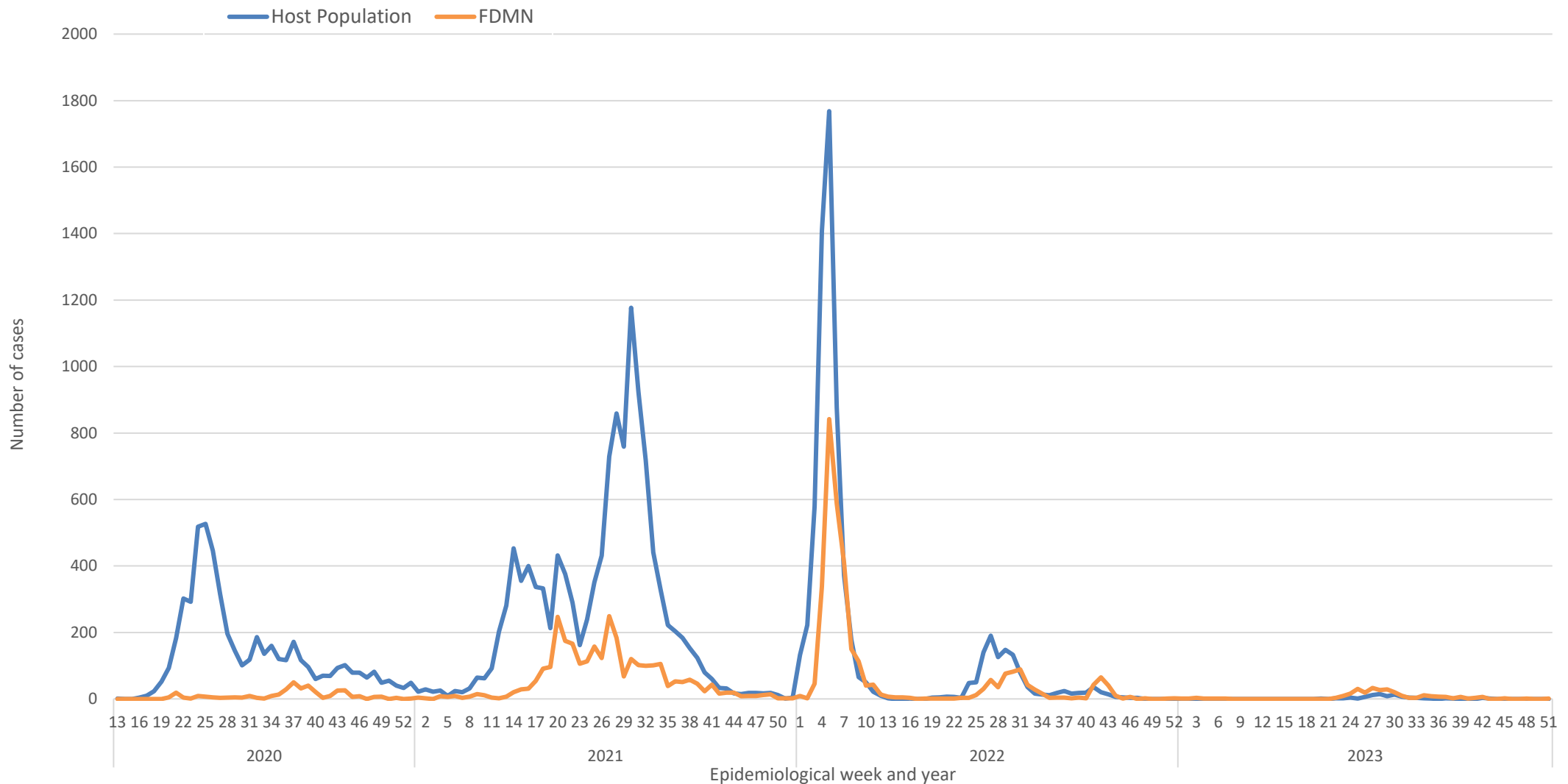
	2018	2019	2020	2021	2022	2023 W51
RDT positive AWD cases/Cholera suspects	49	258	28	357	170	158
Culture confirmed for Cholera	7	184	5	136	70	81



Weekly trends of suspected and confirmed cholera cases from Epi Week 1-51, 2023



Weekly Trends of COVID-19 Cases among Rohingya Refugees and Host Population in Cox's Bazar District from Epi Week 13, 2020- Epi Week 51, 2023



Rohingya refugees: One (1) new confirmed case was reported this week from Ukhia based Camp, weekly TPR is 1.4%, and case incidence was 1.1 cases/1 million pop.
Host Population: No (0) new confirmed case was reported this week from the Host community, weekly TPR were zero.

Weekly and annual Diphtheria Surveillance Updates from 2017- Epi week 51, 2023

Four (4) suspected diphtheria cases were reported in go.data in this Epi week

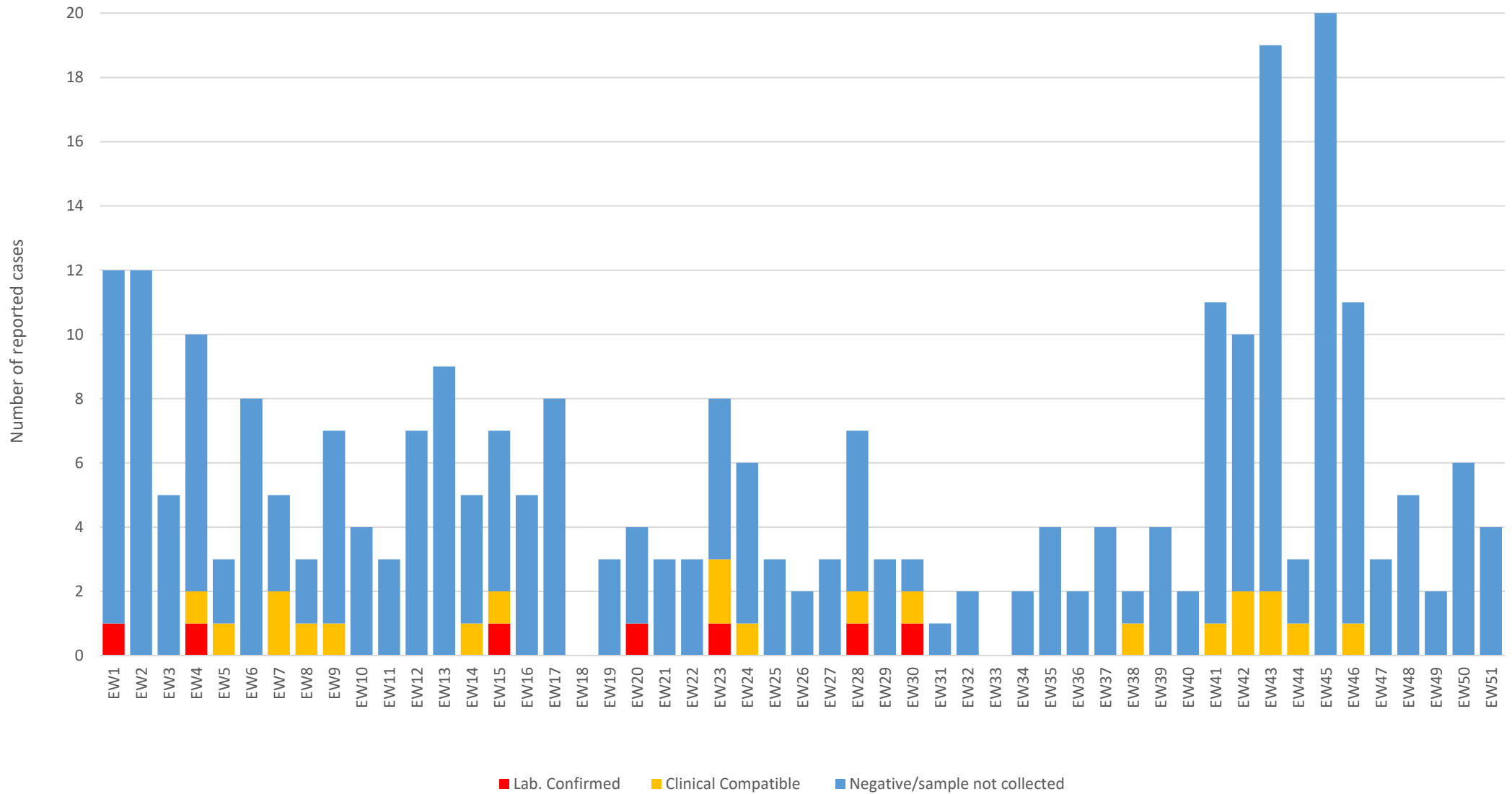
The last confirmed case was reported on 29 July 2023

About 281 cases (7 lab. confirmed, 24 clinically compatible and 250 negative/sample not collected) of which there was one (1) death reported so far in 2023.

In total 54 deaths have so far been reported since 2017, with the last death reported on 15 May 2023

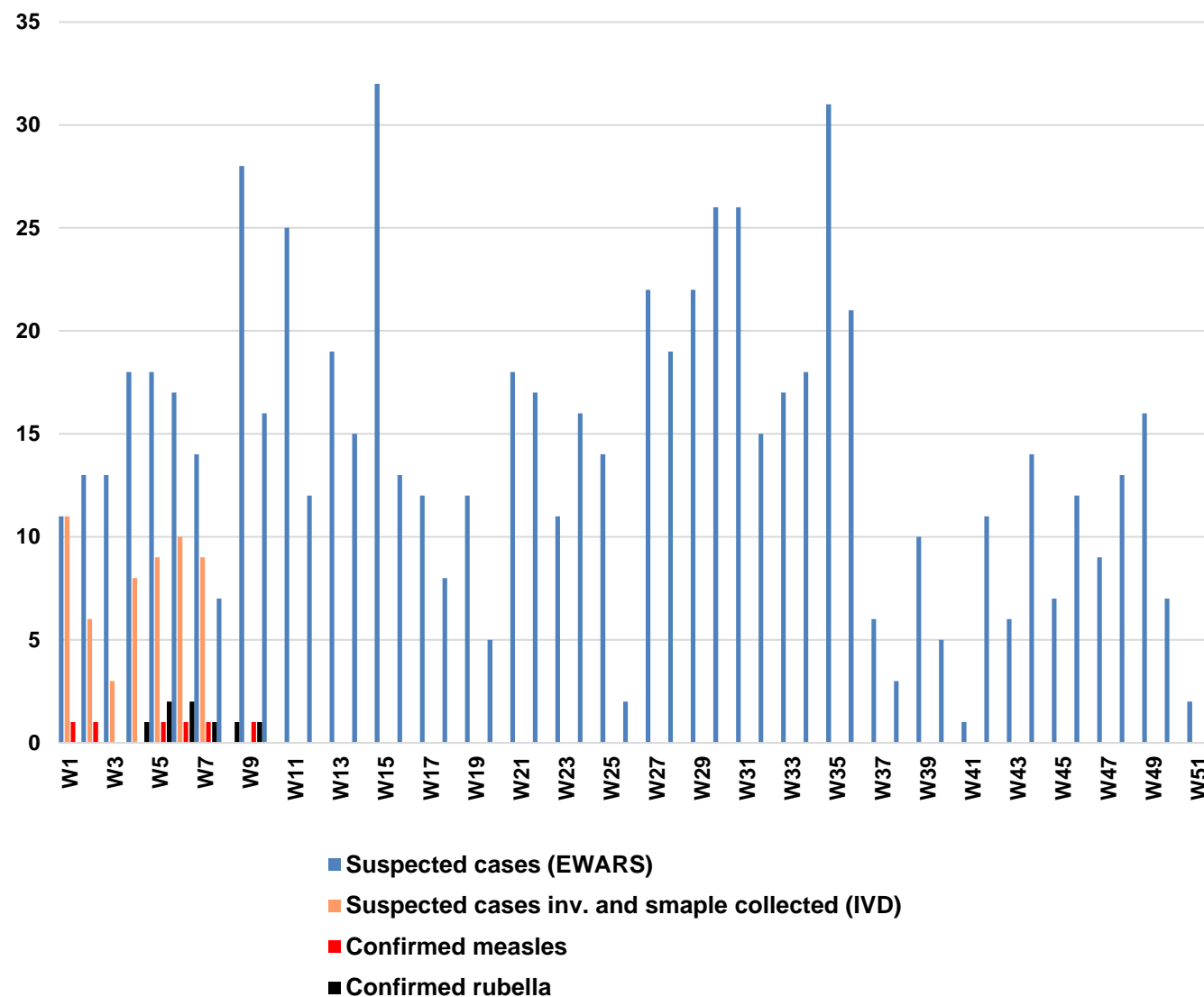
Classification	2017	2018	2019	2020	2021	2022	2023
Lab. Confirmed	66	226	31	19	30	56	7
Clinical Compatible	1154	1555	60	9	29	3	24
Negative/sample not collected	1796	3549	523	198	118	349	250
Death	30	14	3	0	5	2	1

Weekly trends of Diphtheria cases from Epi weeks 1-51, 2023



Epi Curve of Weekly Suspected Measles Cases Week 1-51, 2023

- Two (2) suspected measles cases were reported this Epi week
- A total of 724 cases have been reported through EWARS, 58 cases were reported through IVD case-based surveillance of which 14 were confirmed through the lab (IgM positive)
- Six (6) confirmed cases were measles and 8 were rubella confirmed
- Epidemiology and IVD units continue to undertake joint surveillance and investigations



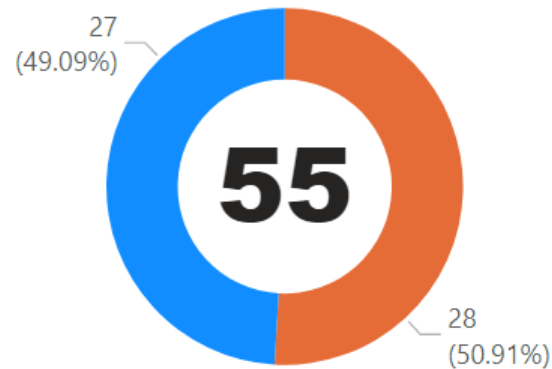
Proportionate Mortality updates Epi week 51, 2023

Probable causes of death	Epi week 51	In 2023
Still Birth	3 (5%)	323 (12%)
Neonatal Death (<28 days old)	1 (2%)	283 (10%)
Infectious Disease	--	69 (3%)
Severe Acute Respiratory Infection (SARI)	2 (4%)	38 (1%)
Injury	1 (2%)	62 (2%)
Maternal Death	1 (2%)	50 (2%)
Acute Malnutrition	--	3(0%)
Other	47 (85%)	1881 (69%)
Total	55 (100%)	2709 (100%)

Partners to report all mortalities into the EWARS platform using both case and event-based reporting as applicable

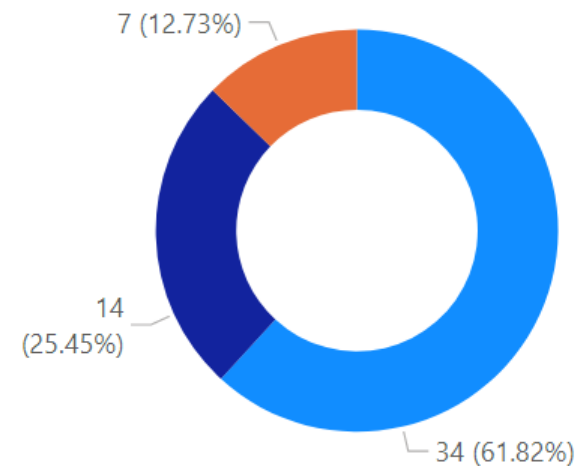
Community-based Mortality Surveillance updates Epi week 51, 2023

Gender distribution



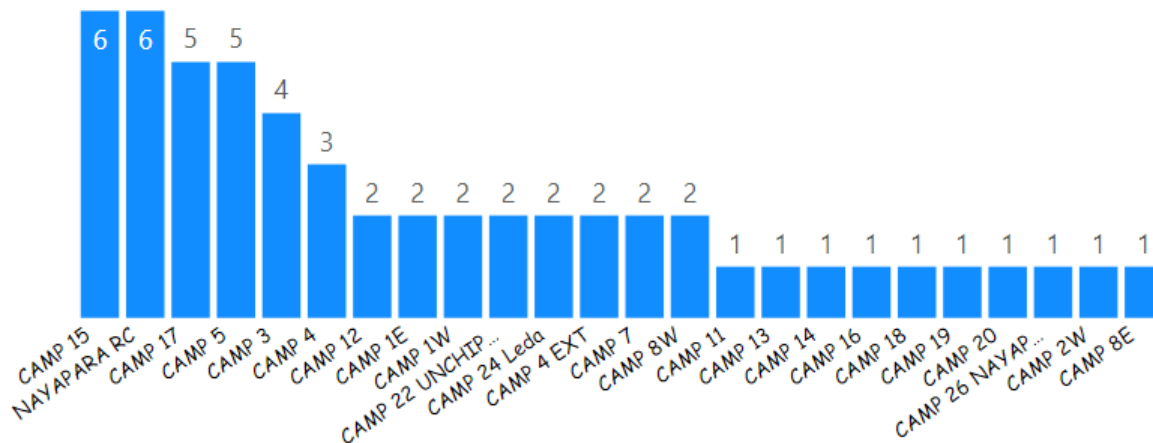
● FEMALE ● MALE

Place of death

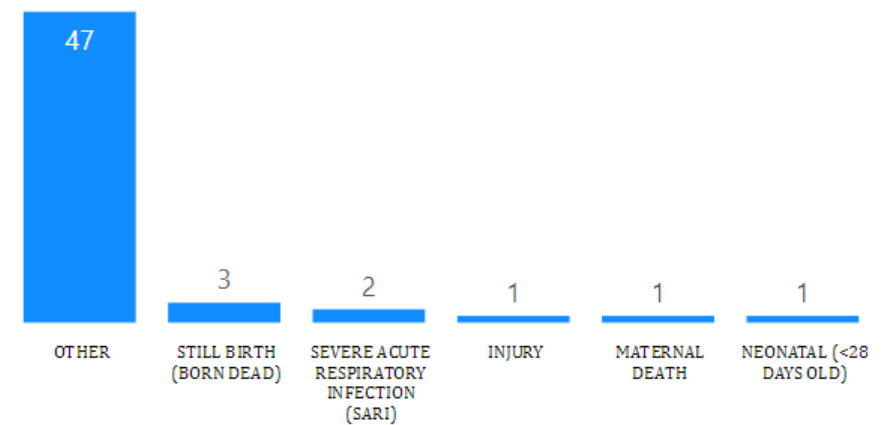


● HOME ● HEALTH FACILITY ● COMMUNITY/PUBLIC PLACE

Distribution of deceased Camp



Distribution of Probable cause of death



Bangladesh

Rohingya Emergency Response

Early Warning, Alert and
Response System (EWARS)

Epidemiological Bulletin W51 2023



Ministry of Health and Family
Welfare Bangladesh



World Health
Organization



HEALTH SECTOR
COX'S BAZAR



Printed: 04:06 Tuesday, 09 January 2024 UTC

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 W51 2023

Table 1 | Coverage

#	%	
952,309	-	Estimated total Rohingya population ¹
923,358	97%	Total population under surveillance
148	-	Total number of health facilities
135	91%	Number of EWARS reporting sites

Table 2 | Early warning performance indicators

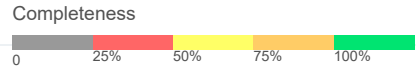
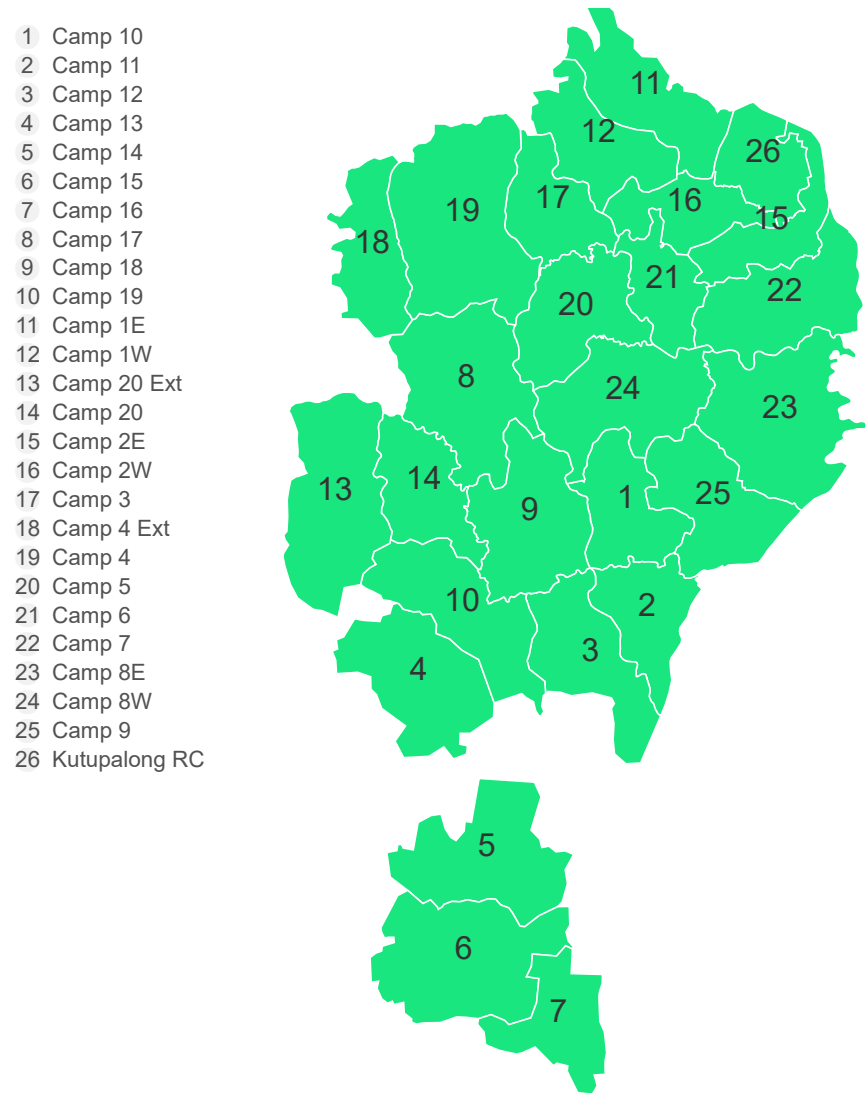
W51	Cumulative (2023)	
121	7280	Number of weekly reports received
90%	96%	Completeness
90%	87%	Timeliness

Table 3 Alert performance indicators

W51	Cumulative (2023)	
76	3,744	Total alerts raised
100%	100%	% verified
0%	0%	% auto-discarded
0%	0%	% undergoing risk assessment
0%	0%	% completed risk assessment

¹ Source: UNHCR. Bangladesh: Joint Government of Bangladesh- UNHCR Population Factsheet. 31 December 2022.

Map 1a | Ukhia completeness by camp



Map 1b | Teknaf completeness by camp

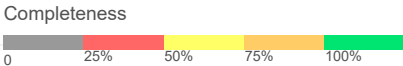
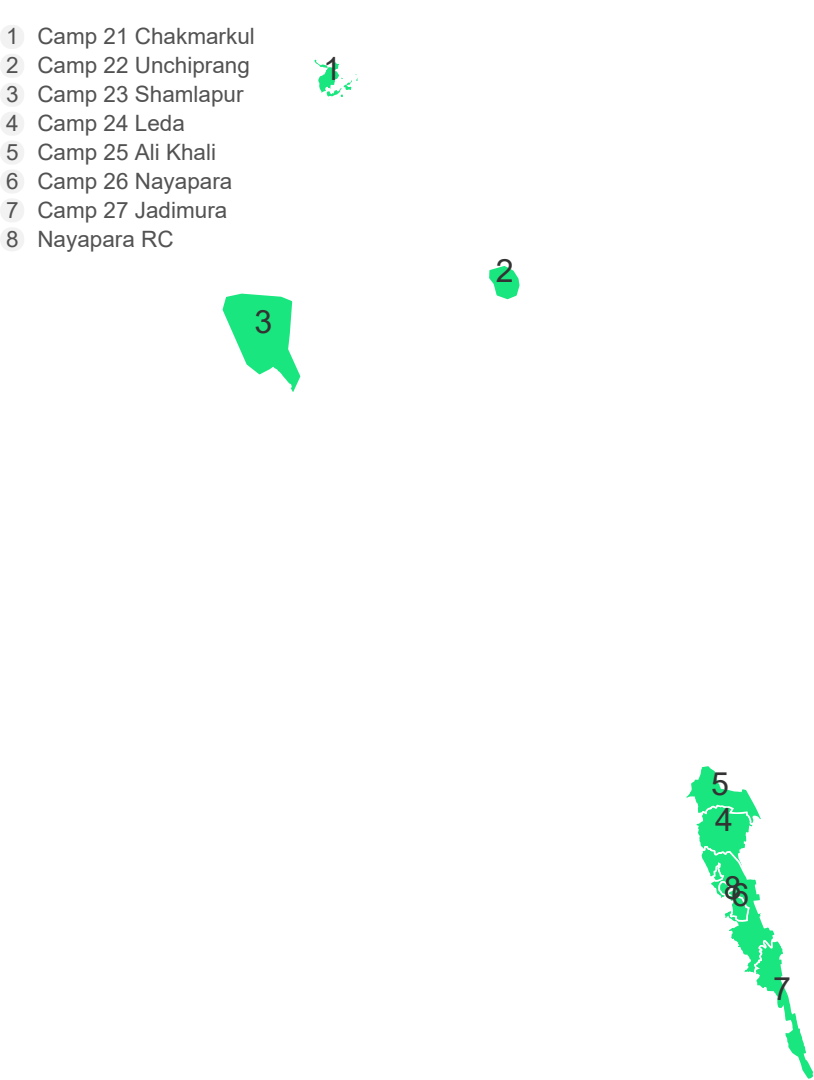


Table 4 | Performance by camp (W51 2023)

Northern group	Reporting		Performance	
	# health facilities	# reports received	Completeness	Timeliness
Ukhia Northern Group				
Camp 1E	4	4	100%	88%
Camp 1W	4	3	75%	75%
Camp 2E	3	3	100%	100%
Camp 2W	3	2	100%	83%
Camp 3	3	3	100%	100%
Camp 4	5	4	80%	80%
Camp 4 Ext	1	1	100%	100%
Camp 5	4	4	100%	100%
Camp 6	2	2	100%	75%
Camp 7	4	4	100%	100%
Camp 8E	9	8	88%	88%
Camp 8W	3	2	100%	83%
Kutupalong RC	2	2	100%	100%

Map 2 | Completeness by camp

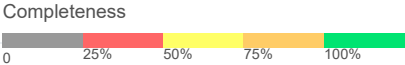
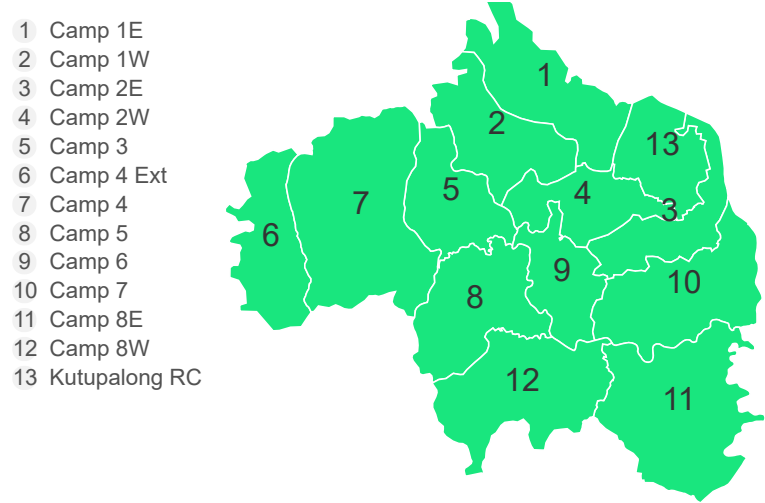


Table 5 | Performance by camp (W51 2023)

Southern group	Reporting		Performance	
	# health facilities	# reports received	Completeness	Timeliness
Ukhia Southern Group				
Camp 10	4	3	100%	88%
Camp 11	3	3	100%	83%
Camp 12	3	3	100%	100%
Camp 13	6	6	100%	75%
Camp 14	5	5	100%	90%
Camp 15	7	6	86%	71%
Camp 16	7	7	100%	100%
Camp 17	4	4	100%	100%
Camp 18	4	4	100%	100%
Camp 19	3	3	100%	100%
Camp 20	3	3	100%	100%
Camp 20 Ext	2	2	100%	100%
Camp 9	5	4	100%	90%

Map 3 | Completeness by camp

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

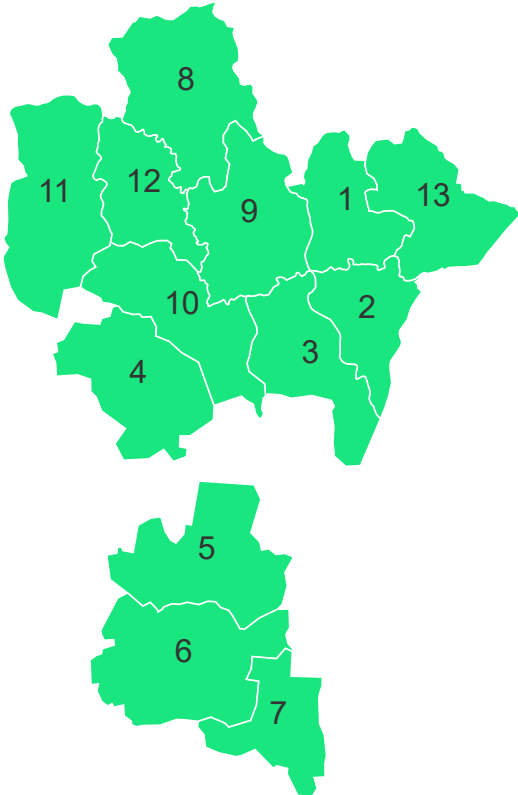


Table 6 | Performance by camp (W51 2023)

Teknaf	Reporting		Performance	
	# health facilities	# reports received	Completeness	Timeliness
Ukhia Teknaf				
Camp 21 Chakmarkul	3	3	100%	67%
Camp 22 Unchiprang	4	3	75%	75%
Camp 23 Shamlapur	2	2	100%	100%
Camp 24 Leda	2	2	100%	50%
Camp 25 Ali Khali	3	3	100%	100%
Camp 26 Nayapara	4	4	75%	88%
Camp 27 Jadimura	2	2	100%	100%
Nayapara RC	2	2	100%	100%

Map 4 | Completeness by camp

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



Table 7 | Performance by partner (W51 2023)

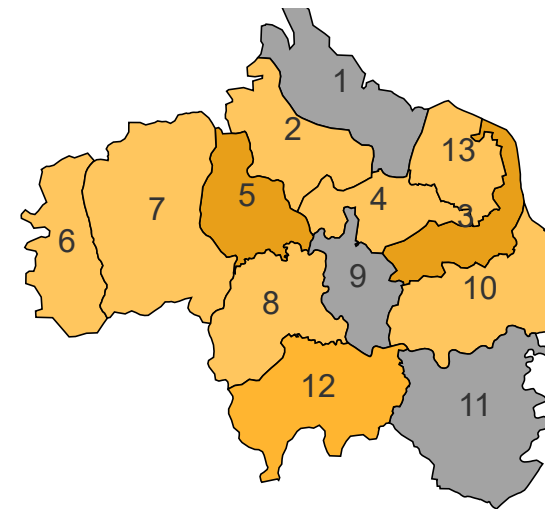
Partner	Performance		Reporting		Partner	Performance		Reporting	
	# sites	# reports received	Completeness	Timeliness		# sites	# reports received	Completeness	Timeliness
AKF	2	1	50%	50%	IRC	8	3	75%	75%
AWARD	12	6	50%	50%	MSF	14	7	100%	86%
BASHMAH	2	0	0%	0%	MoH	14	4	57%	57%
BDRCS	18	8	44%	44%	MHI	0	1	0%	0%
BRAC	10	10	50%	50%	Medair	0	0		
CARE	0	0			FH/MTI	8	4	100%	100%
GH/CPI	2	1	50%	50%	PRANTIC	2	0	0%	0%
DBC	2	1	50%	50%	PULSE	2	1	50%	50%
DSK	0	0			QC	2	1	50%	0%
DCHT-PWJ	2	1	50%	50%	PHD	16	8	88%	88%
FRNDS	16	5	63%	63%	RPN	4	1	25%	25%
GK	20	10	100%	100%	RHU	6	3	50%	100%
Global One	0	1	0%	0%	RI	0	0		
GUSS	2	1	50%	50%	RTMI	14	6	86%	86%
HAEFA	4	2	50%	50%	SALT	2	1	50%	50%
HAIB	0	0			SCI	14	7	100%	100%
HMBDF	4	2	100%	100%	DCHT-MM	2	1	50%	0%
HOPE	2	1	50%	50%	Turkish Government	2	1	50%	50%
ICRC	0	0			TdH	4	2	100%	100%
IOM	38	19	89%	89%					

Table 8 | Performance by camp

Northern group	W51		Cumulative (2023)	
	# alerts	% verif.	# alerts	% verif.
Alerts Northern group				
Camp 1E	0	0%	113	80%
Camp 1W	2	0%	172	76%
Camp 2E	7	0%	452	68%
Camp 2W	2	0%	191	74%
Camp 3	7	0%	191	64%
Camp 4	2	0%	153	73%
Camp 4 Ext	2	0%	45	64%
Camp 5	1	0%	86	77%
Camp 6	0	0%	72	71%
Camp 7	1	0%	81	73%
Camp 8E	0	0%	88	82%
Camp 8W	5	0%	178	75%
Kutupalong RC	1	0%	53	85%

Map 5 | Number of alerts by camp

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



of alerts

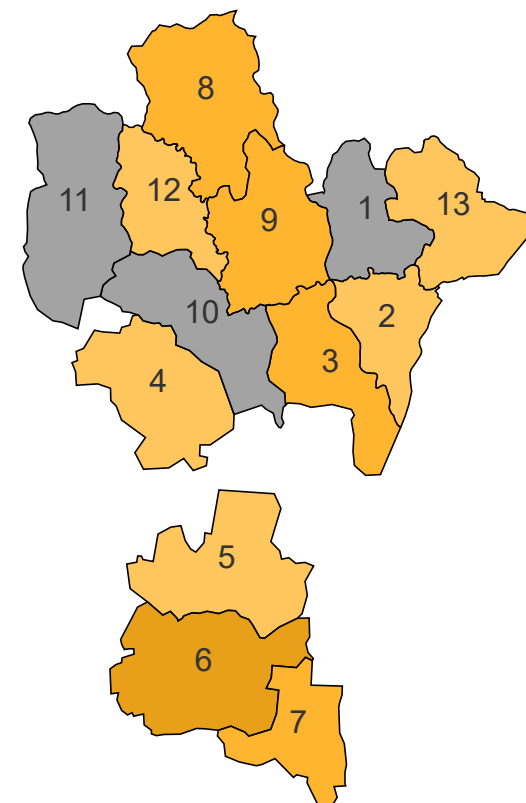


Table 9 | Performance by camp

Southern group	W51		Cumulative (2023)	
	# alerts	% verif.	# alerts	% verif.
Alerts Northern group				
Camp 10	0	0%	91	55%
Camp 11	1	0%	69	74%
Camp 12	3	0%	80	75%
Camp 13	1	0%	106	79%
Camp 14	1	0%	117	67%
Camp 15	6	0%	171	58%
Camp 16	3	0%	126	67%
Camp 17	3	0%	62	63%
Camp 18	3	0%	182	65%
Camp 19	0	0%	18	83%
Camp 20	1	0%	75	65%
Camp 20 Ext	0	0%	20	90%
Camp 9	1	0%	107	76%

Map 6 | Number of alerts by camp

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



of alerts



Table 10 | Performance by camp

Teknaf	W51		Cumulative (2023)	
	# alerts	% verif.	# alerts	% verif.
Alerts Northern group				
Camp 21 Chakmarkul	3	0%	111	61%
Camp 22 Unchiprang	3	0%	77	81%
Camp 23 Shamlapur	0	0%	4	100%
Camp 24 Leda	8	0%	279	58%
Camp 25 Ali Khali	0	0%	16	75%
Camp 26 Nayapara	0	0%	37	70%
Camp 27 Jadimura	0	0%	15	73%
Nayapara RC	9	0%	69	62%

Map 7 | Number of alerts by camp

- 1

Camp 21 Chakmarkul
- 2

Camp 22 Unchiprang
- 3

Camp 23 Shamlapur
- 4

Camp 24 Leda
- 5

Camp 25 Ali Khali
- 6

Camp 26 Nayapara
- 7

Camp 27 Jadimura
- 8

Nayapara RC

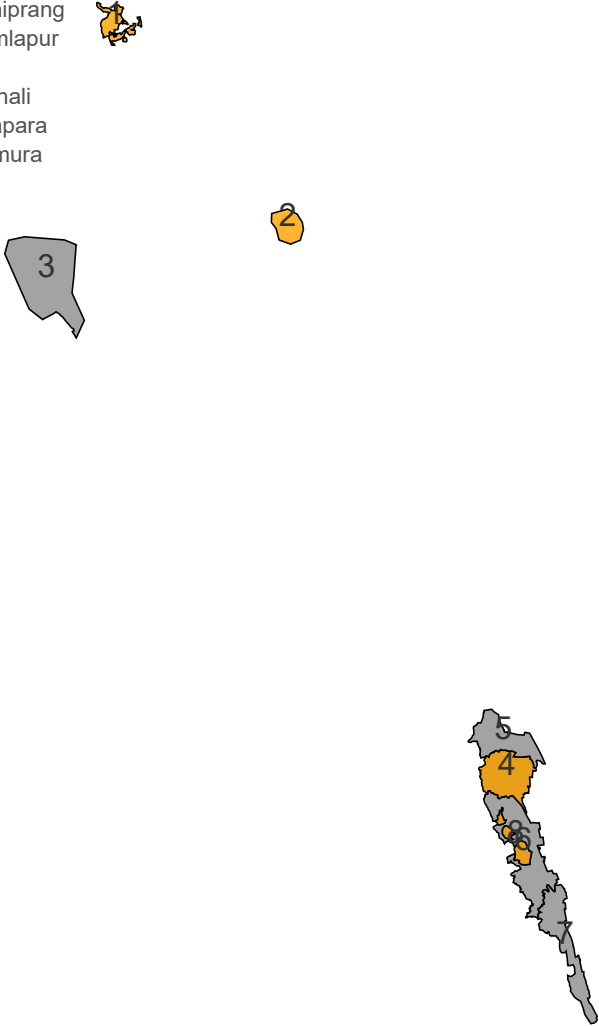


Table 11 | Performance by type of alert

Event	W51		Cumulative (2023)	
	# alerts	% verif.	# alerts	% verif.
Indicator-based surveillance				
Malaria	0	0%	0	0%
Measles	0	0%	77	94%
Bloody Diarr.	0	0%	0	0%
AFP	0	0%	11	91%
Meningitis	2	0%	17	76%
Haem. fever (susp.)	0	0%	13	77%
NNT	0	0%	2	50%
Unexp. fever	0	0%	39	85%
AWD	0	0%	42	81%
ARI	0	0%	37	76%
AJS	0	0%	22	95%
Varicella (Susp.)	0	0%	93	99%
Suspected COVID-19	0	0%	0	0%
Event-based surveillance				
EBS total	5	0%	254	76%

Table 12 | Risk assessment

W51	Cumulative (2023)	
0	0	Low risk
0	0	Moderate risk
0	0	High risk
0	0	Very high risk

For more help and support, please contact:

Dr. Imrul Kayes
Medical Officer - Civil Surgeon Office (MO-CS)
Ministry of Health and Family Welfare
Cox's Bazar, Bangladesh
Telephone: +88 01726296025
Email: mailkayesk65@gmail.com

Dr. David Odhiambo Otieno
Team Lead_Epidemiology
World Health Organization
Cox's Bazar, Bangladesh
Telephone: +88 017 01202994
Email: otienod@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 W51 2023



Ministry of Health and Family
Welfare Bangladesh



World Health
Organization



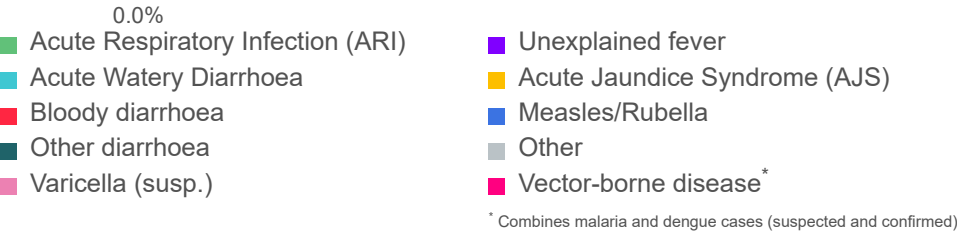
HEALTH SECTOR
COX'S BAZAR



Printed: 04:02 Tuesday, 09 January 2024 UTC

Proportional morbidity

Figure 1 | Proportional morbidity (W51 2023)



Disease	W51		2023	
	# cases	% morbidity	# cases	% morbidity
AWD	2,213	2.8%	135,559	2.8%
Bloody diarr.	171	0.2%	10,791	0.2%
Other diarr.	888	1.1%	58,238	1.2%
Susp. Varicella	29	0.0%	29,764	0.6%
ARI	16,998	21.8%	926,508	19.0%
Measles/Rub.	2	0.0%	724	0.0%
AFP	0	0.0%	163	0.0%
Susp. menin.	5	0.0%	235	0.0%
AJS	13	0.0%	718	0.0%
Susp. HF	9	0.0%	699	0.0%
Neo. tetanus	0	0.0%	16	0.0%
Adult tetanus	0	0.0%	118	0.0%
Malaria (conf.)	2	0.0%	190	0.0%
Malaria (susp.)	53	0.1%	4,176	0.1%
Dengue (conf.)	115	0.1%	19,939	0.4%
Dengue (susp.)	51	0.1%	8,799	0.2%
Unexpl. fever	434	0.6%	46,805	1.0%
Sev. Malnut.	29	0.0%	3,024	0.1%
Inj./Wounds	2,243	2.9%	127,127	2.6%
Other	54,719	70.1%	3,485,523	71.7%
Total	77,615	100%	4,863,952	100%

Trend in consultations and key diseases

Figure 2 | Trend in proportional morbidity for key diseases (W51)

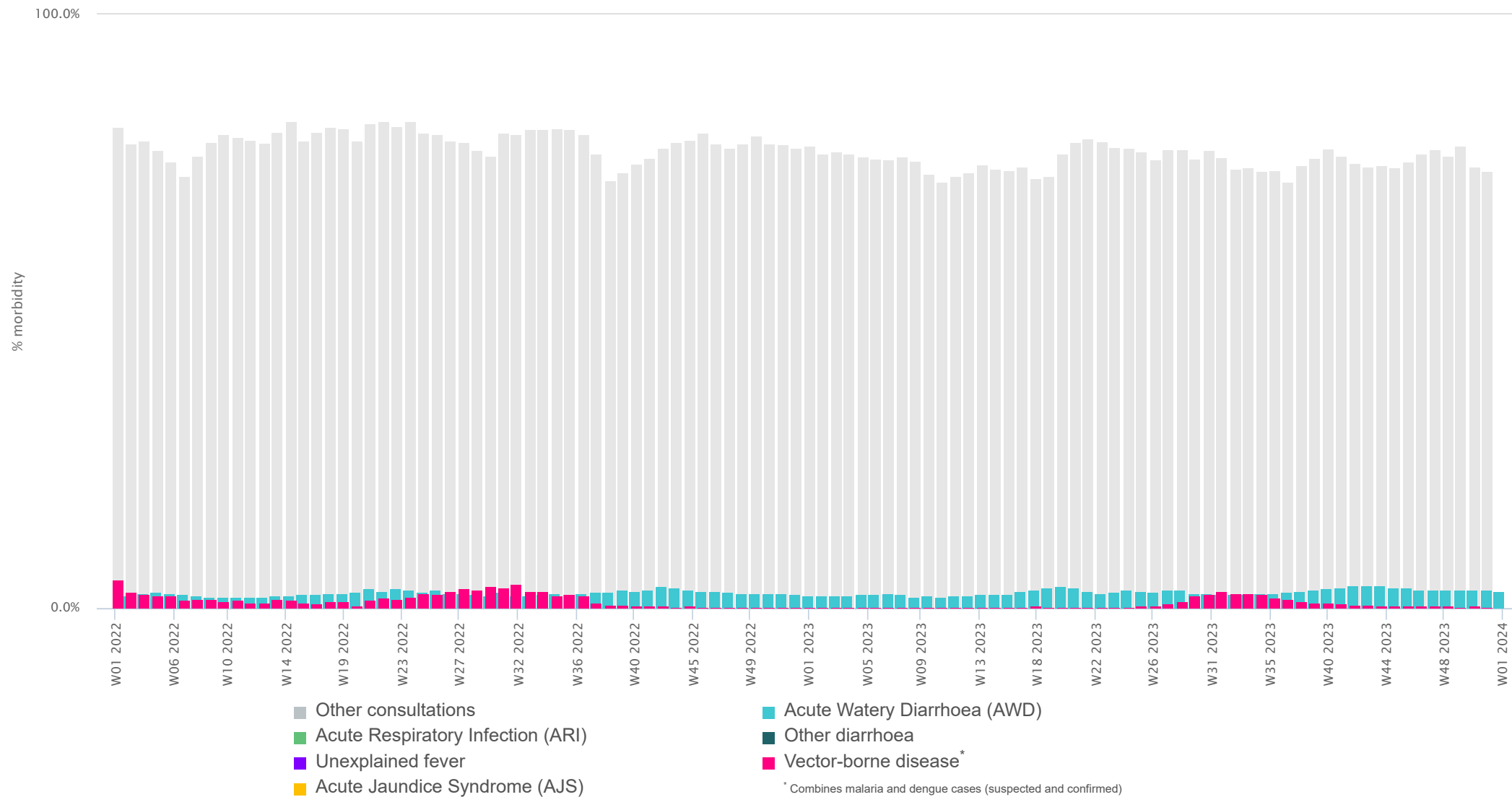
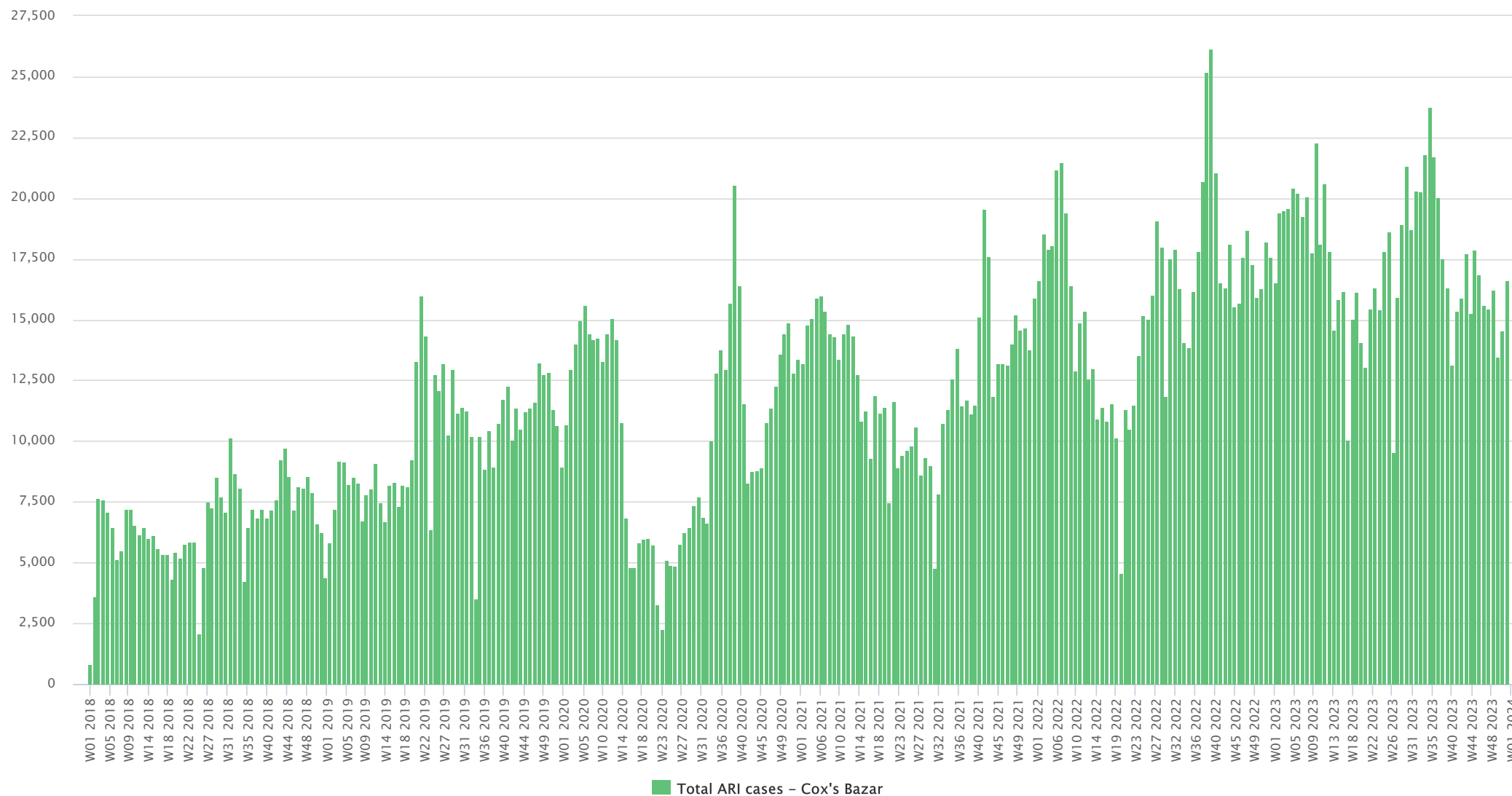
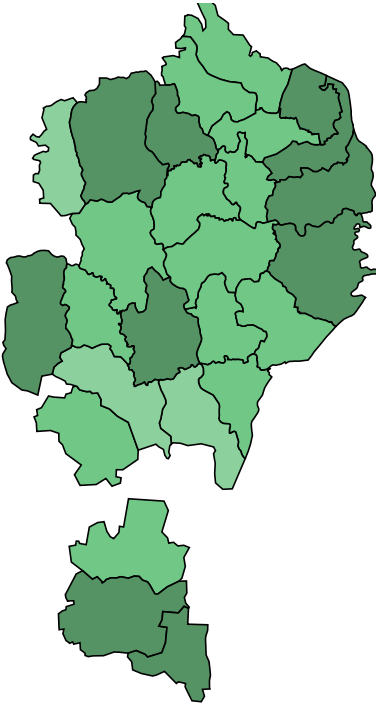


Figure 3 | Trend in number of cases over time (W38 2017 - W51 2023)



Map 1 | Map of cases by camp (W51 2023)

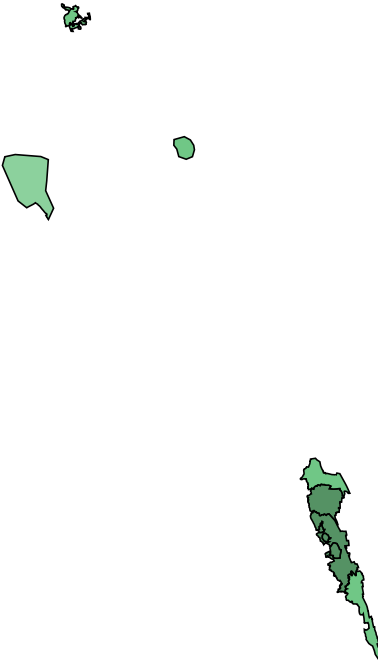
a. Ukhia | Number of cases



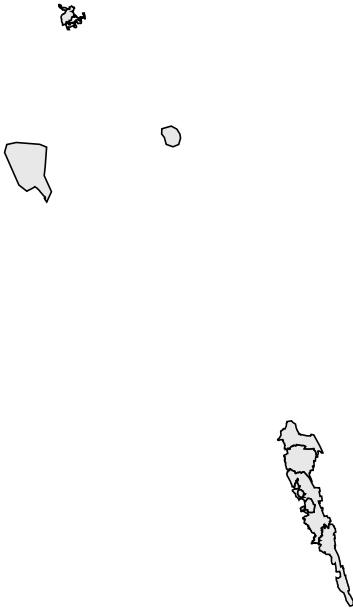
b. Ukhia | Number of alerts



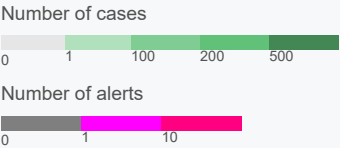
c. Teknaf | Number of cases



d. Teknaf | Number of alerts



Map legend



Alert threshold

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

Alert management (W51 2023)

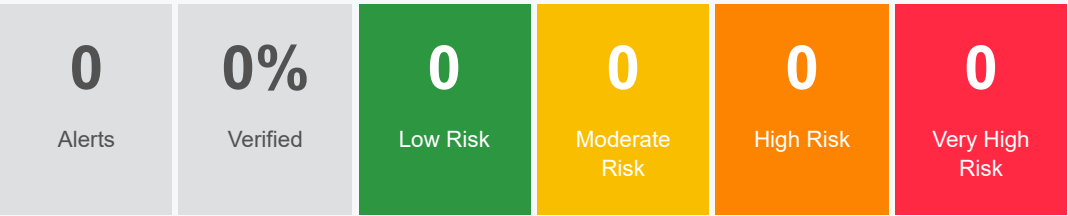


Figure | % sex

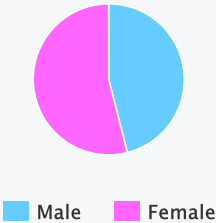


Figure | % age

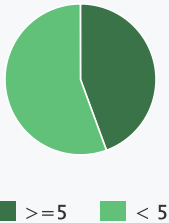
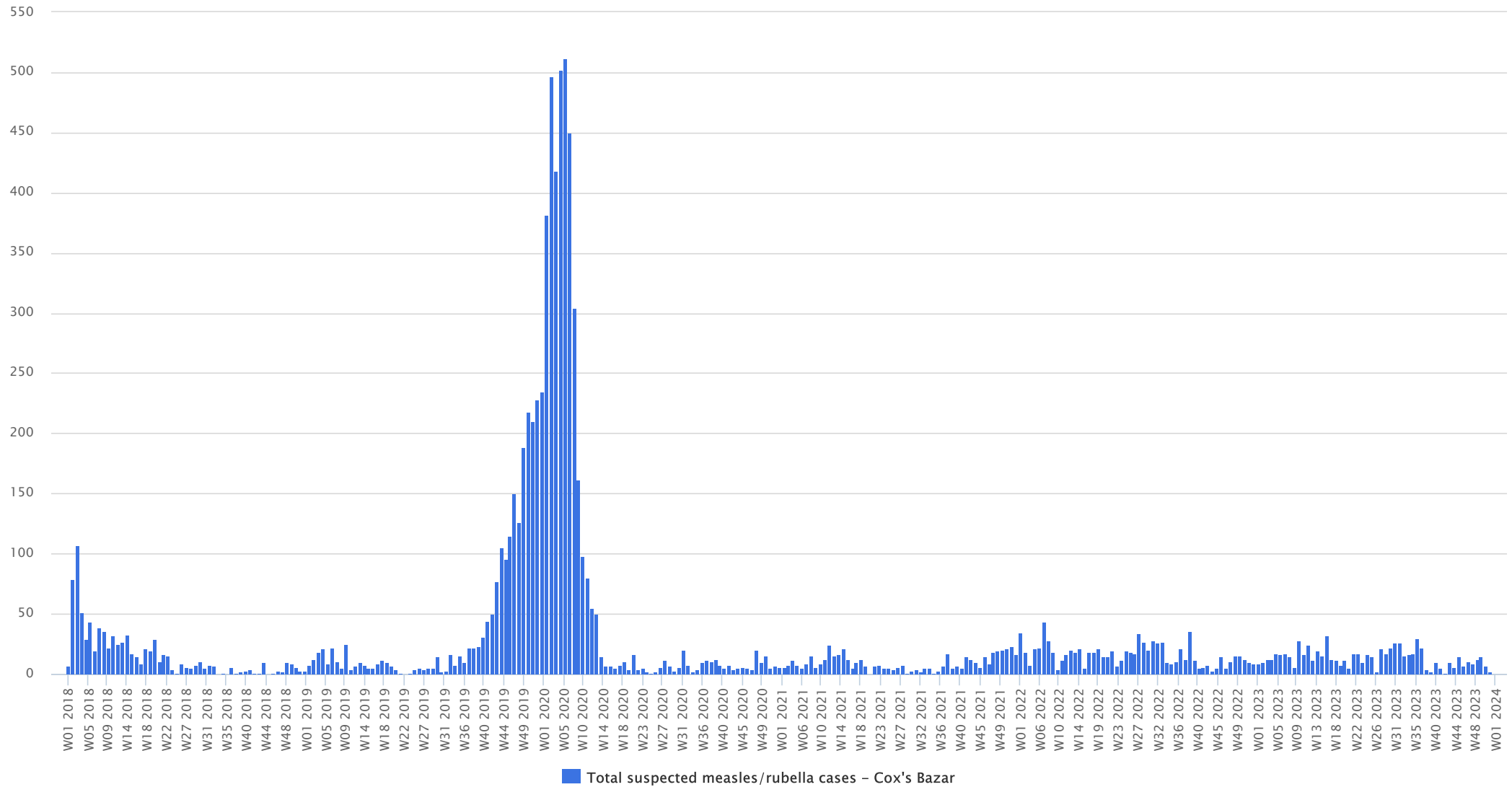
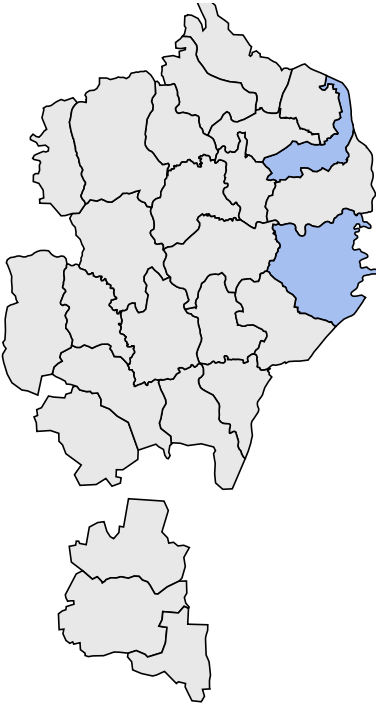


Figure 4 | Trend in number of suspected cases over time (W38 2017 - W51 2023)



Map 2 | Map of cases by camp (W51 2023)

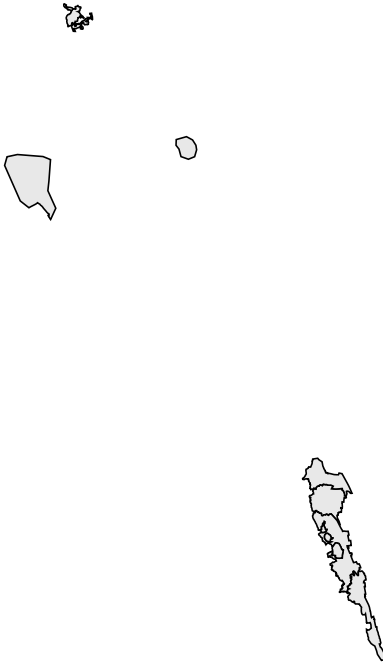
a. Ukhia | Number of cases



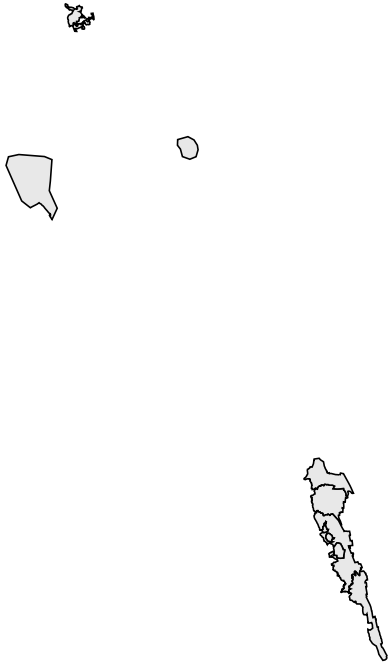
b. Ukhia | Number of alerts



c. Teknaf | Number of cases



d. Teknaf | Number of alerts



Map legend



Alert threshold
1 case. Source: IEDCR

Alert management (W51 2023)

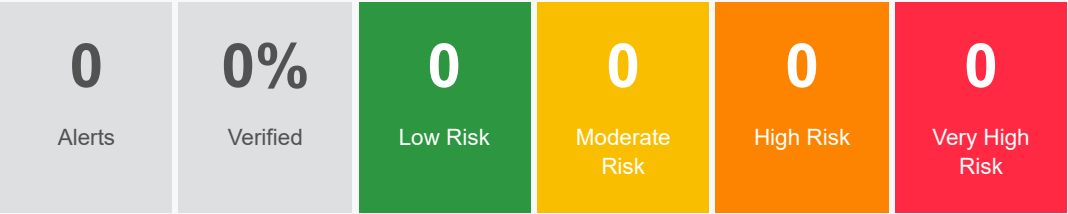


Figure | % sex

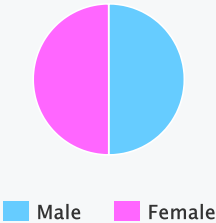


Figure | % age

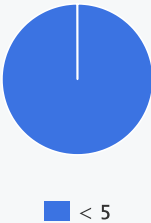
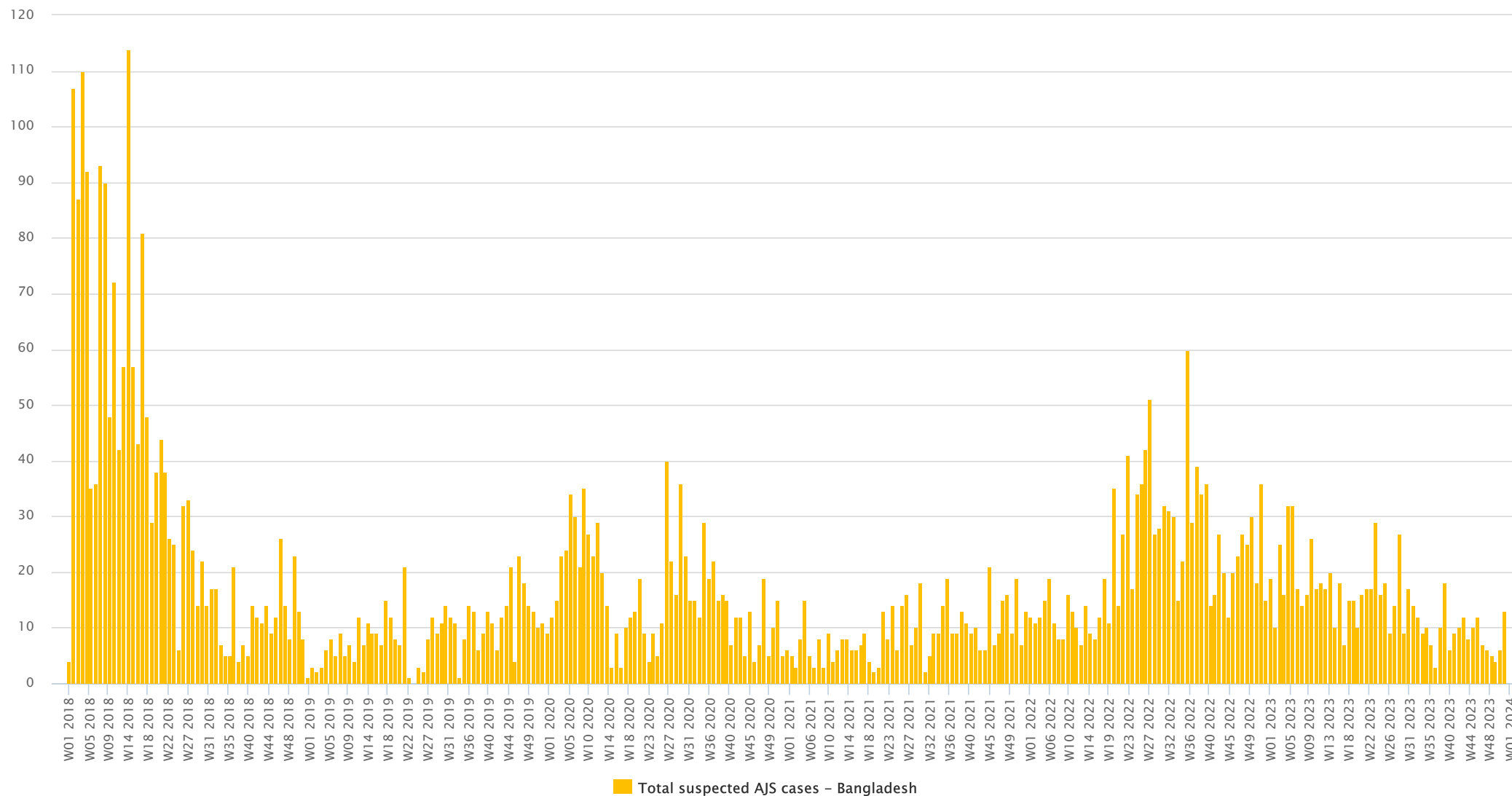
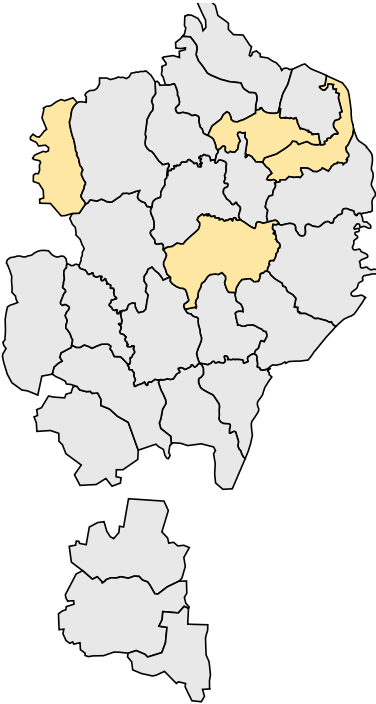


Figure 5 | Trend in number of cases over time (W38 2017 - W51 2023)



Map 3 | Map of cases by camp (W37 2017 - W51 2023)

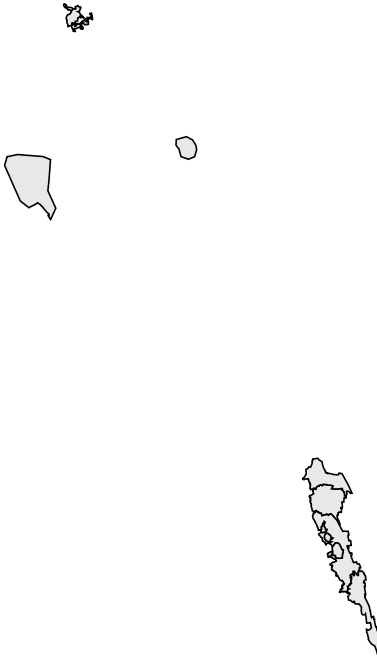
a. Ukhia | Number of cases



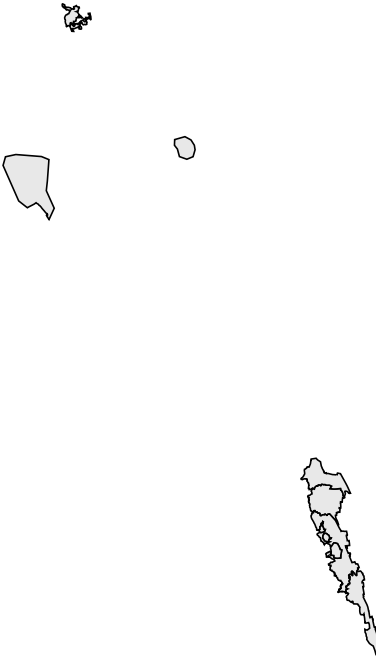
b. Ukhia | Number of alerts



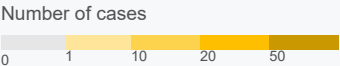
c. Teknaf | Number of cases



d. Teknaf | Number of alerts



Map legend



Alert threshold

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

Alert management (W51 2023)

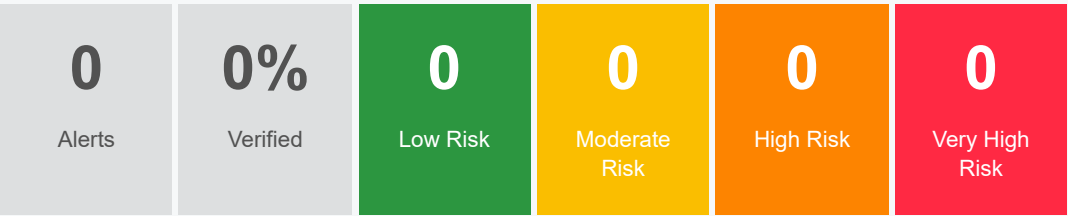
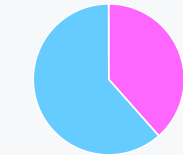
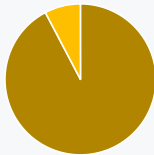


Figure | % sex



Female Male

Figure | % age



>= 5 < 5

Figure 6 | Trend in number of cases over time (W38 2017 - W51 2023)

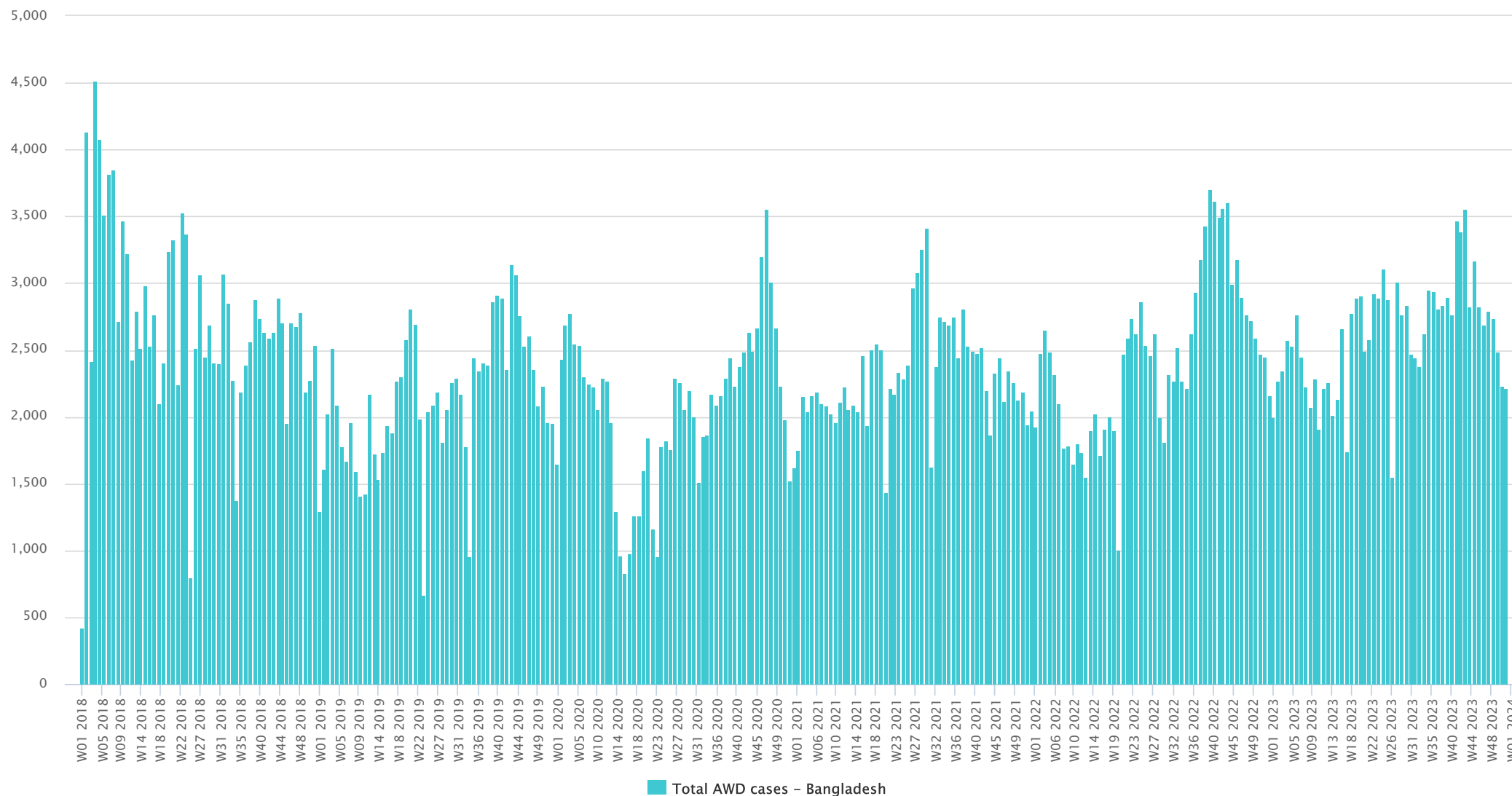
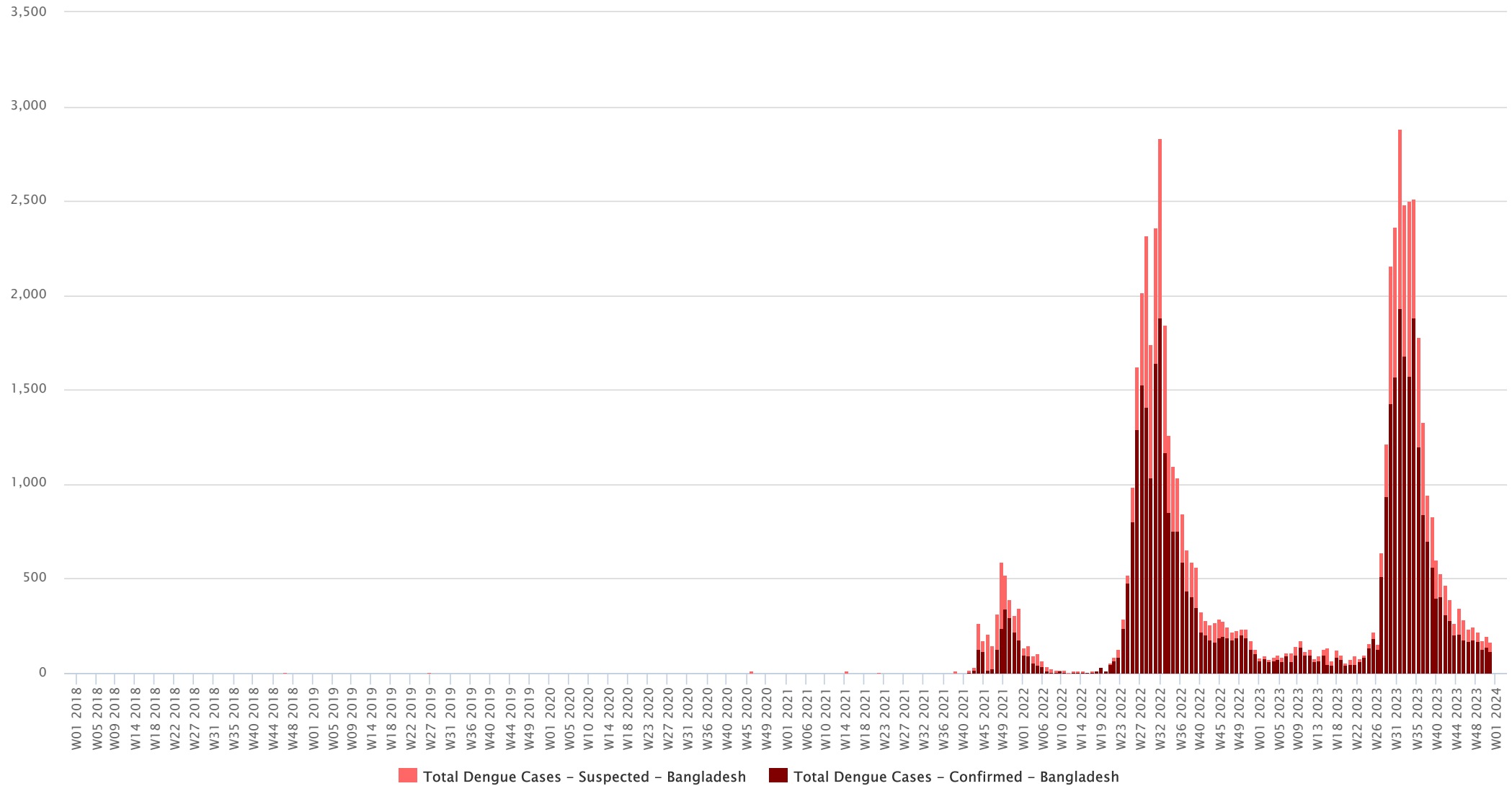
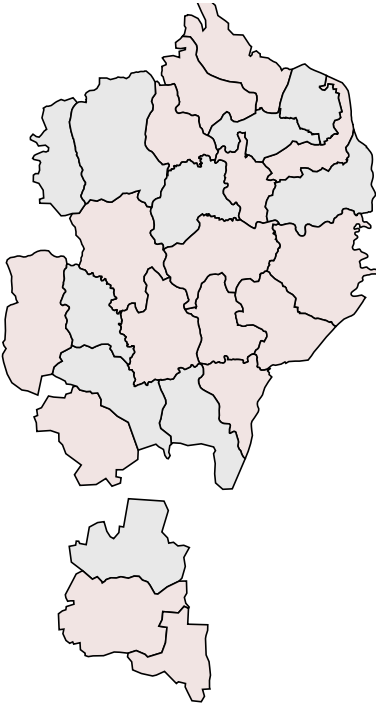


Figure 7 | Trend in number of cases over time (W38 2017 - W51 2023)



Map 4 | Map of cases by camp (W37 2017 - W51 2023)

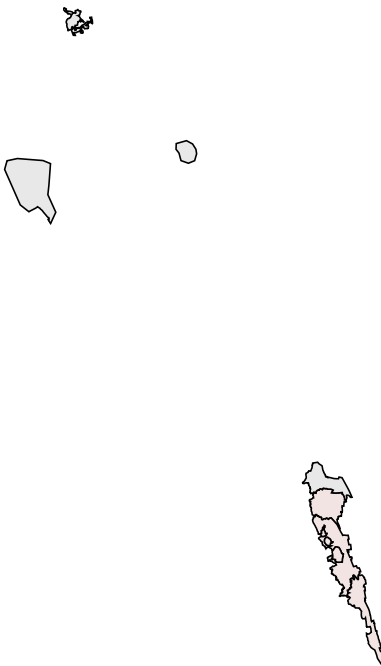
a. Ukhia | Number of cases



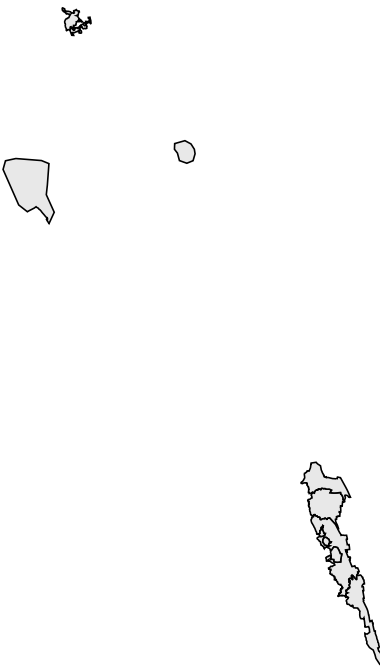
b. Ukhia | Number of alerts



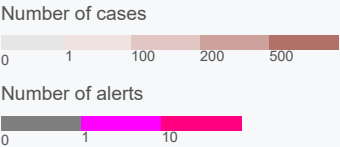
c. Teknaf | Number of cases



d. Teknaf | Number of alerts



Map legend



Alert threshold

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

Alert management (W51 2023)

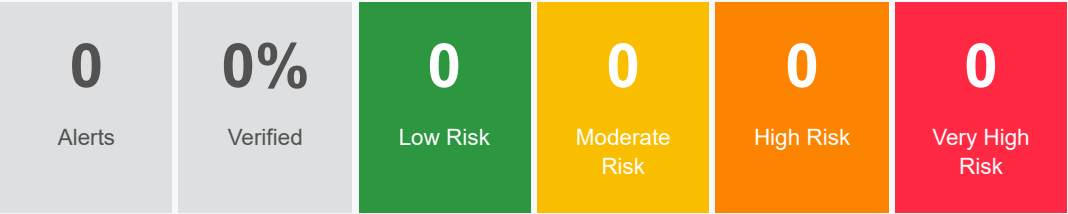


Figure | % sex

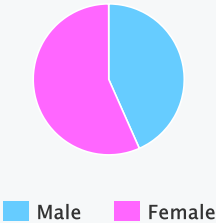


Figure | % age

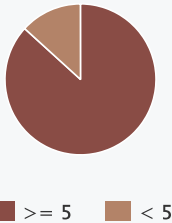
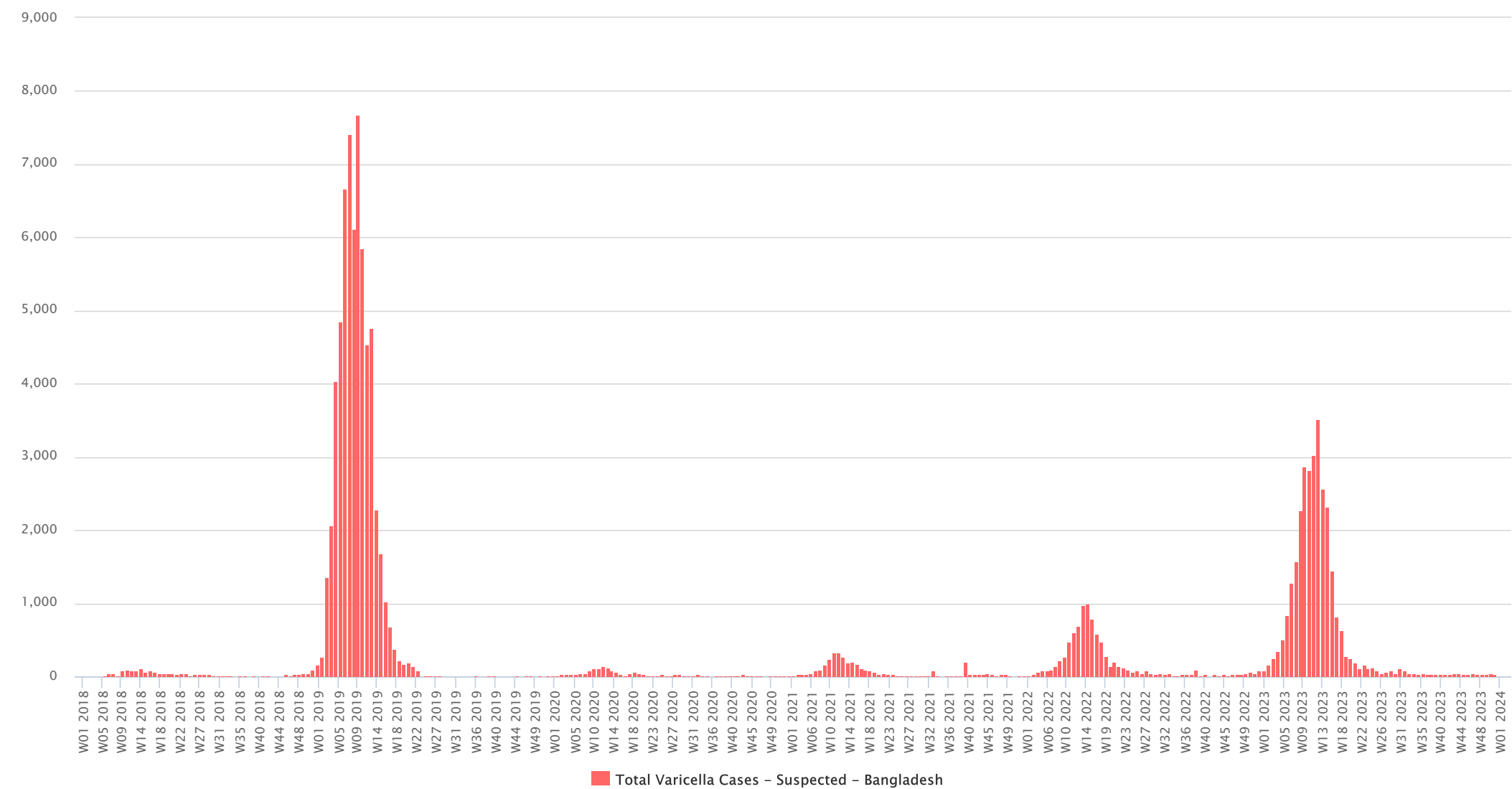
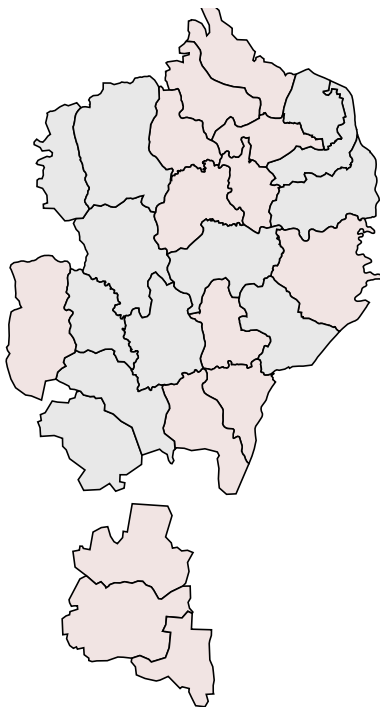


Figure 7 | Trend in number of cases over time (W38 2017 - W51 2023)

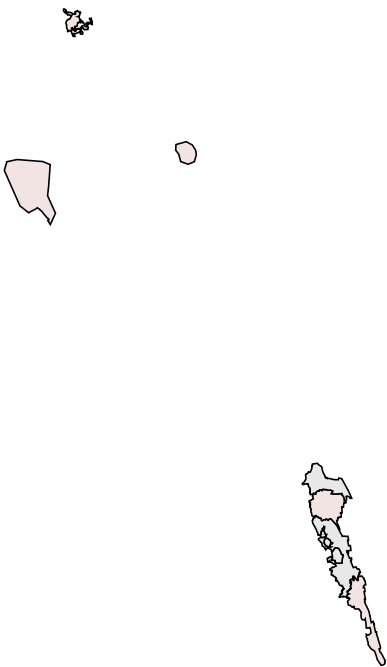


Map 4 | Map of cases by camp (W37 2017 - W51 2023)

a. Ukhia | Number of cases



c. Teknaf | Number of cases



Map legend

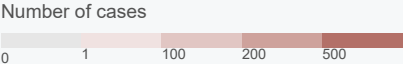


Figure | % sex

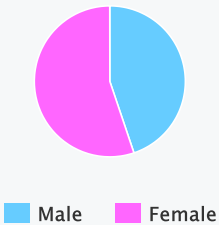
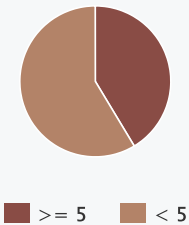


Figure | % age



For more help and support, please contact:

Dr. Imrul Kayes
Medical Officer - Civil Surgeon Office (MO-CS)
Ministry of Health and Family Welfare
Cox's Bazar, Bangladesh
Telephone: +88 017826296025
Email: mailkayesk65@gmail.com

Dr. David Odhiambo Otieno
Team Lead_Epidemiology
World Health Organization
Cox's Bazar, Bangladesh
Telephone: +88 017 01202994
Email: otienod@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