



Epidemiological Highlights

Week 45 (30 Oct- 5 Nov) 2022



World Health
Organization

Highlights: COVID-19

COVID-19 (High Priority)

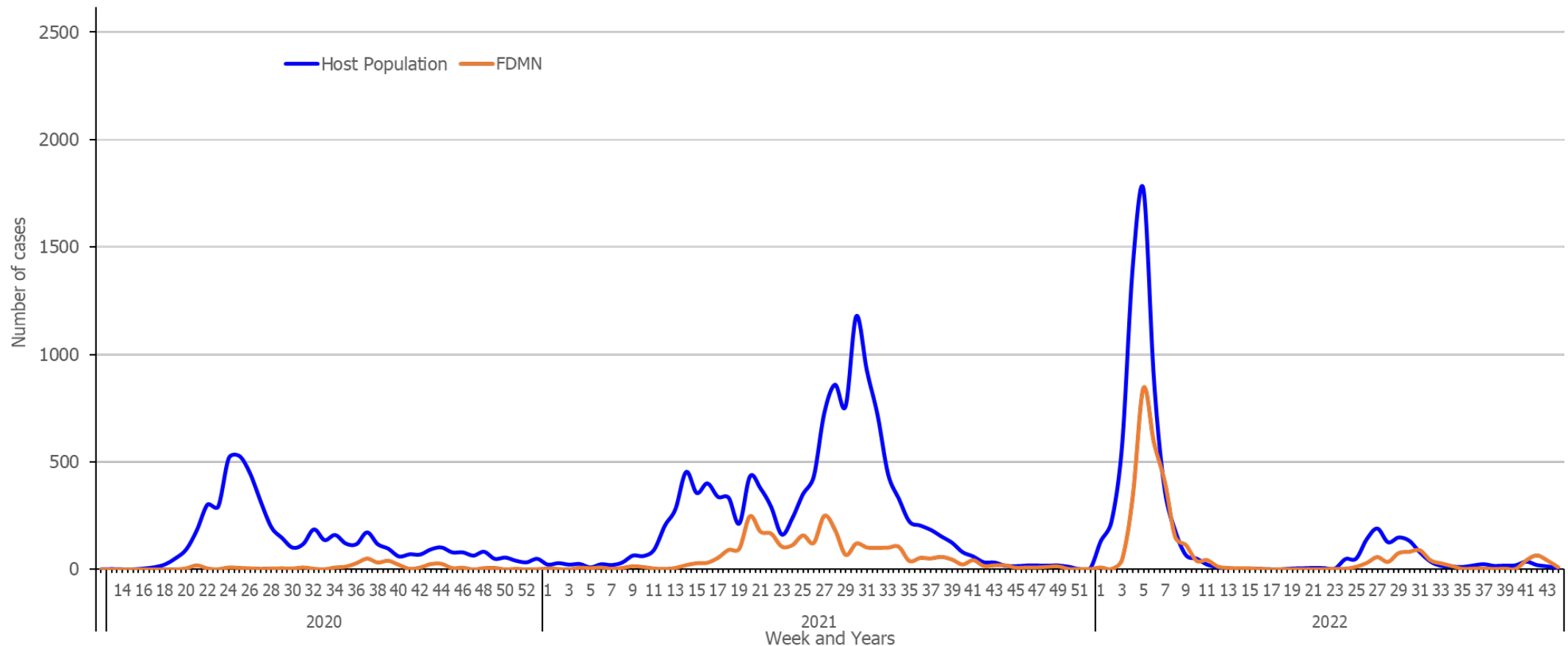
FDMN: The level of infections is drastically declining this week

- Ten (10) new confirmed cases were reported this week, a 75% drop from the previous week (44 cases last week)
- Weekly TPR dropped to 4-fold (2.1%) from 8.8% the previous week
- Weekly incidence 4-fold dropped from 47.7/1m population/week in Epi Week 43 to 11.1 cases/1m population/week this week
- No new death reported, and total deaths stabilized at 44 (CFR of 0.1%) while cumulative cases so far are 6,577
- The level of recovery continues to steady at 99%

Host Population: Steady decline in trends of cases

- Six (06) new confirmed cases were reported this week, down from 14 cases reported the previous week
- Weekly TPR dropped by over 50% to 2.4% this week (5.3% last Epi week)
- Weekly case incidence dropped 2.1 cases/1m population/week from 5.0 cases/1m population/week
- Recovery level continues to steady at 99%
- No new death and total deaths remained at 269 (CFR-1.1%)

Highlights: COVID-19



FDMNs: 10 new confirmed cases reported this week, Weekly TPR dropped to **2.1 %** from 8.8% the previous week
Host Population: Six(06) new cases down from 14 cases last week & Weekly TPR dropped to 2.4% (5.3% In Epi Week 43)

EWARS Reporting Updates

- Currently, a total of 169 health facilities are registered in EWARS
 - Only 127/169 weekly reports were received on time in week 45
 - Timeliness of reporting for this week was 81%
 - Ninety-eight (98) alerts were triggered
 - All alerts were reviewed and verified by the WHO EWARS team; this was more than that of the previous week (52 alerts in week 44, 2022)

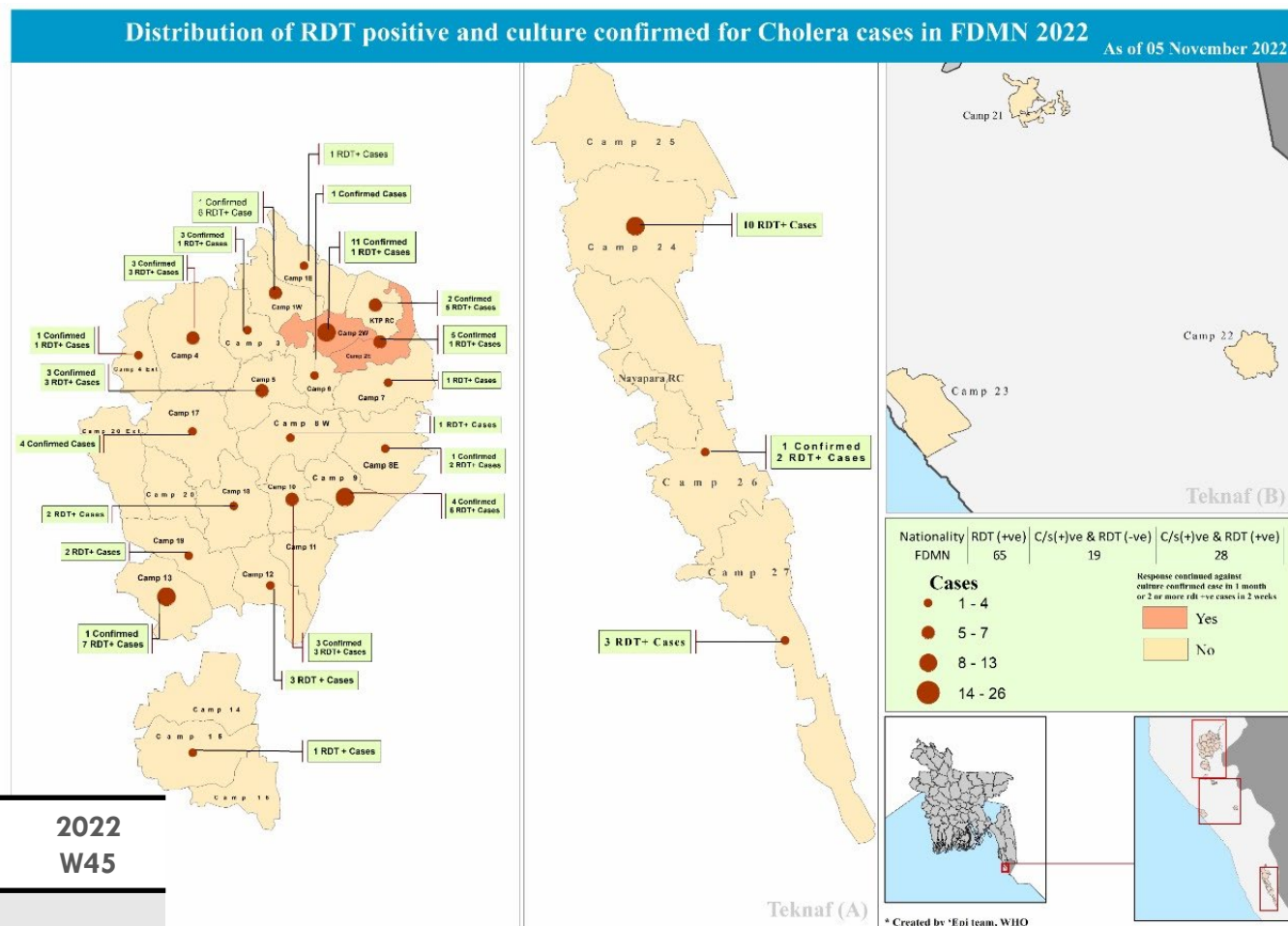
Highlights: Morbidities and Mortalities

- Acute Respiratory Infections (16.2%), Diarrheal Diseases (4.4%) & Injuries, and Wounds (2.3%) were the diseases and health conditions with the highest proportional morbidity in week 45.
- Monitoring of suspected SARI death under enhanced Community-based mortality surveillance has been continued since week 28, 2020. A total of 130 SARI deaths have so far been reported in 2022 of which seven (07) deaths upon an investigation of all SARI deaths were reclassified as probable COVID-19 Deaths
- This Epi week, two (2) new SARI death was reported as highlighted below:

Year	Suspected SARI death reported (current week)	Reclassified as death due to probable COVID-19
2022	130 (2)	7
2021	96	15
2020	49	2

Cholera/AWD Surveillance Updates

- In this week, there is three (3) new RDT-positive case was reported, among samples sent for testing.
- In 2022 total of one hundred forty-eight (161) RDT-confirmed cholera cases were reported as of W45 2022. Of these 61 were positive for culture, and 100 were negative for culture.
- Cumulatively there are 853 RDT and culture-confirmed cholera cases of which 393 cases were culture-confirmed since transmission in 2018



	2018	2019	2020	2021	2022 W45
RDT positive/culture confirmed for Cholera	49	258	28	357	161
Culture confirmed for Cholera	7	184	5	136	61

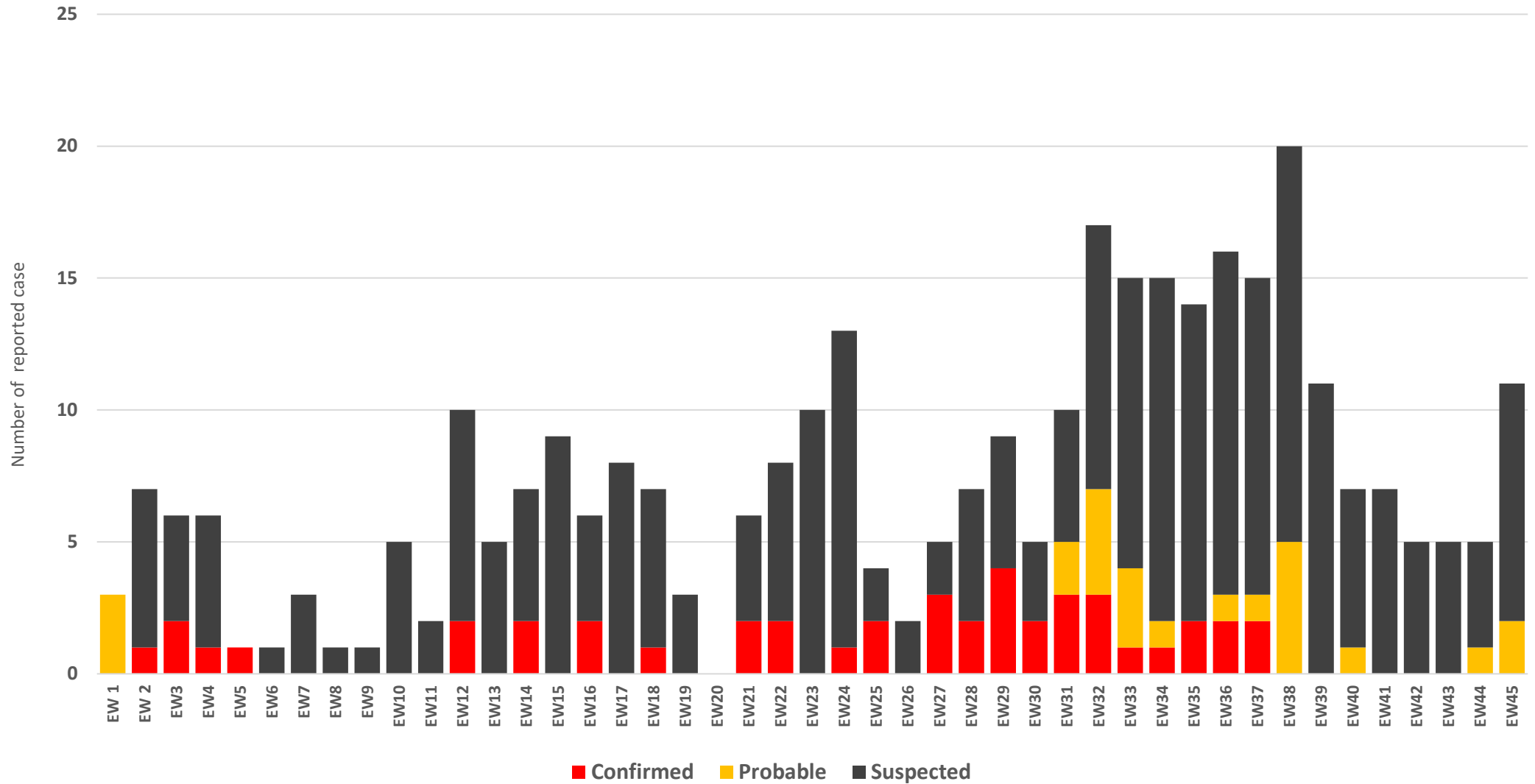
Diphtheria Surveillance Updates

- Two (2) probable and 9 suspected diphtheria cases were reported in go.data in this Epi week 45
- The last confirmed case was reported on 14 September 2022
- In total 54 deaths have so far been reported since 2017, with the last death reported on 18 October 2022

Classification	2017	2018	2019	2020	2021	2022
Confirmed	66	226	31	19	30	46
Probable	1154	1555	60	9	29	24
Suspected	1796	3549	523	198	118	265
Death	30	14	3	0	5	2

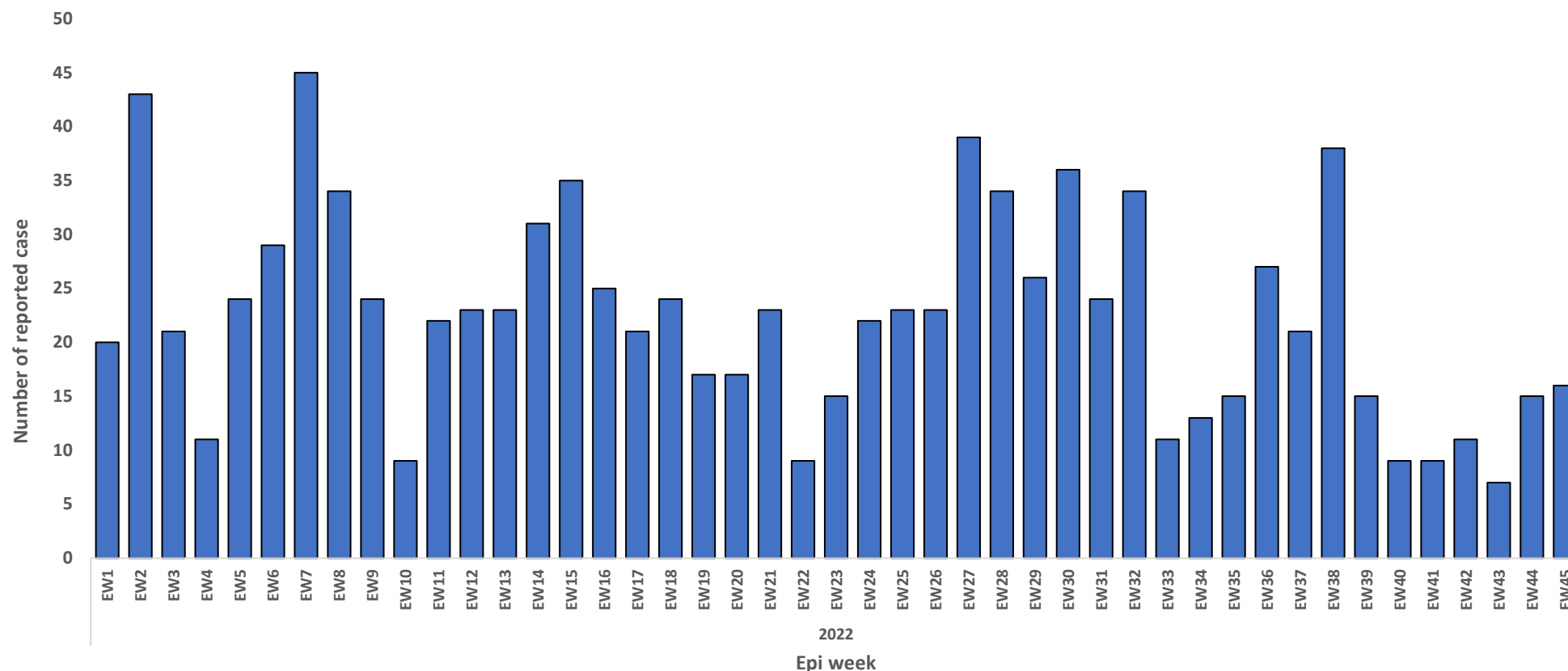
Trends of Diphtheria cases

Total number of diphtheria case reported in EWARS from week 1-45, 2022



Epi Curve of Suspected Measles Cases

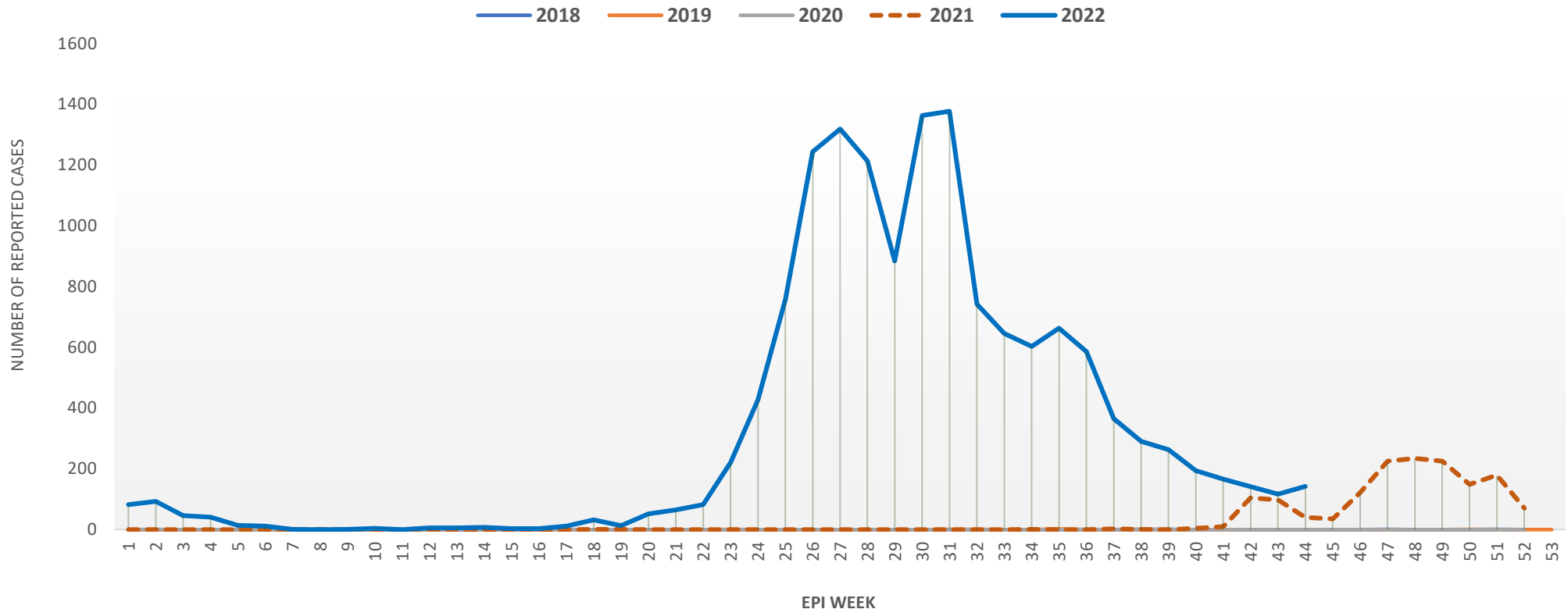
Total number of Measles case reported in EWARS from week 1-45, 2022



- > In week 45, 16 suspected measles cases were reported through weekly reporting. This brings the total number of suspected measles cases to 1,013 reported in 2022
- > About 55% (558/1,013) of the total suspected measles cases were reported through case-based reporting and samples collected for laboratory confirmation

Dengue Surveillance Updates

Yearly Trends of Dengue case trend from 2018 - Epi Week 45, 2022



- In week 45, 88 dengue cases were reported through case-based reporting. This brings the total number of dengue cases to 14,442 reported in 2022
- One (1) new death was reported this week and stands at a total of 21 in 2022 with a CFR of 0.1%

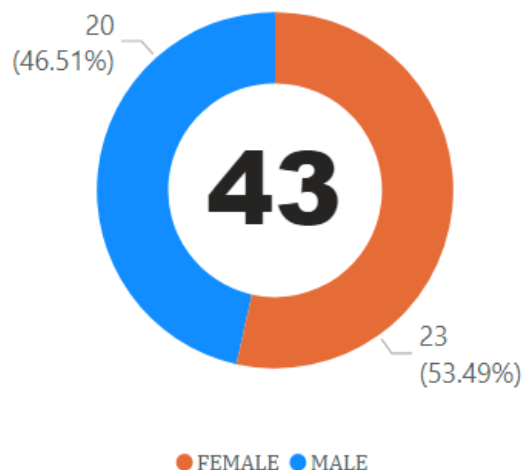
Community-based Mortality surveillance updates Epi week 45

Probable causes of death	Epi week 45	In 2022
Still Birth	7 (16%)	192 (10%)
Neonatal Death (<28 days old)	7 (16%)	196 (11%)
Infectious Disease	--	163 (9%)
Severe Acute Respiratory Infection (SARI)	2 (5%)	50 (3%)
Injury	--	42 (2%)
Maternal Death	1 (2%)	37 (2%)
Acute Malnutrition	--	1 (0%)
Other	26 (60%)	1,156 (63%)
Total	43 (100%)	1,837 (100%)

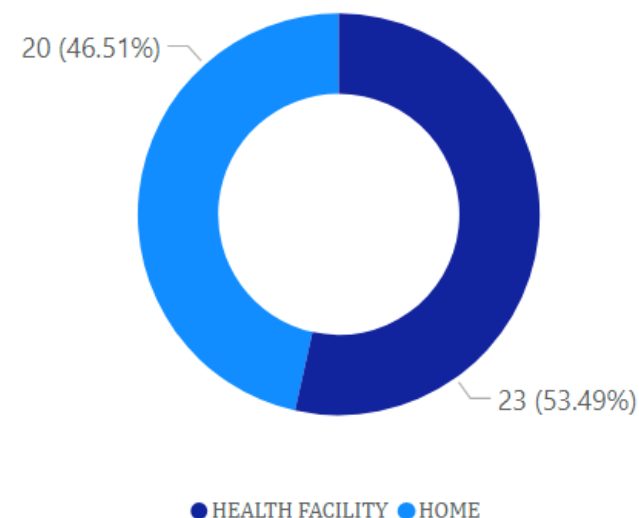
Partners to report all mortalities into the EWARS platform using both case and event-based reporting as applicable

Community-based Mortality surveillance updates Epi week 45

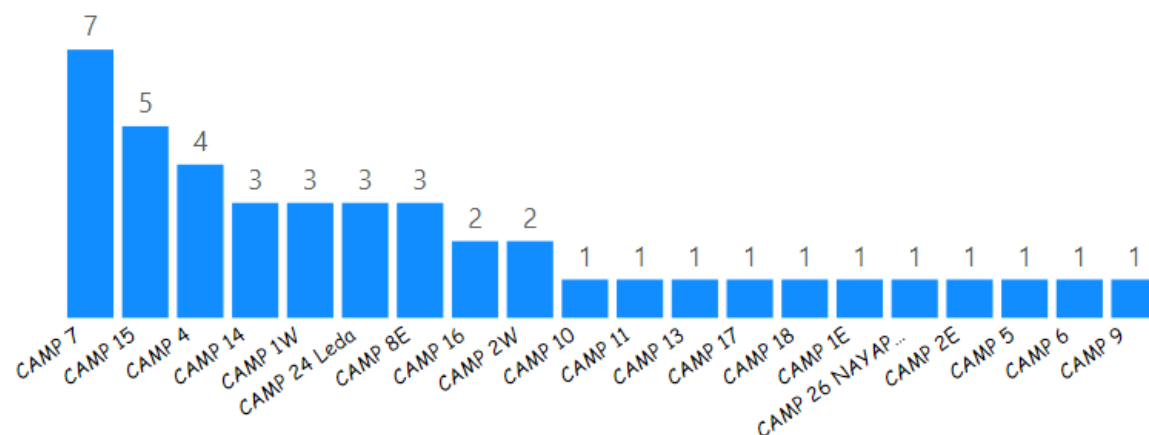
Gender distribution



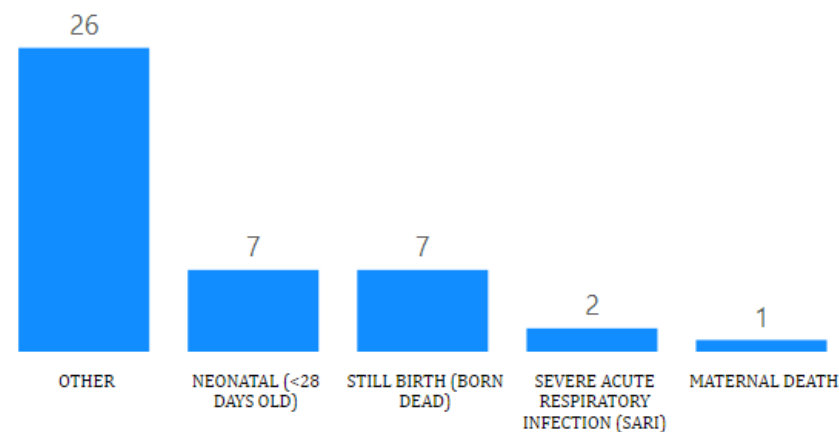
Place of death



Distribution of deceased Camp



Distribution of Probable cause of death



Bangladesh

Rohingya Emergency Response

Early Warning, Alert and
Response System (EWARS)

Epidemiological Bulletin W45 2022



Ministry of Health and Family
Welfare Bangladesh



World Health
Organization



HEALTH SECTOR
COX'S BAZAR



Printed: 03:42 Wednesday, 09 November 2022 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 W45 2022

Table 1 | Coverage

#	%	
918,841	-	Estimated total Rohingya population ¹
902,066	98%	Total population under surveillance
175	-	Total number of health facilities
169	97%	Number of EWARS reporting sites

Table 2 | Early warning performance indicators

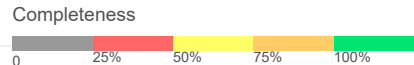
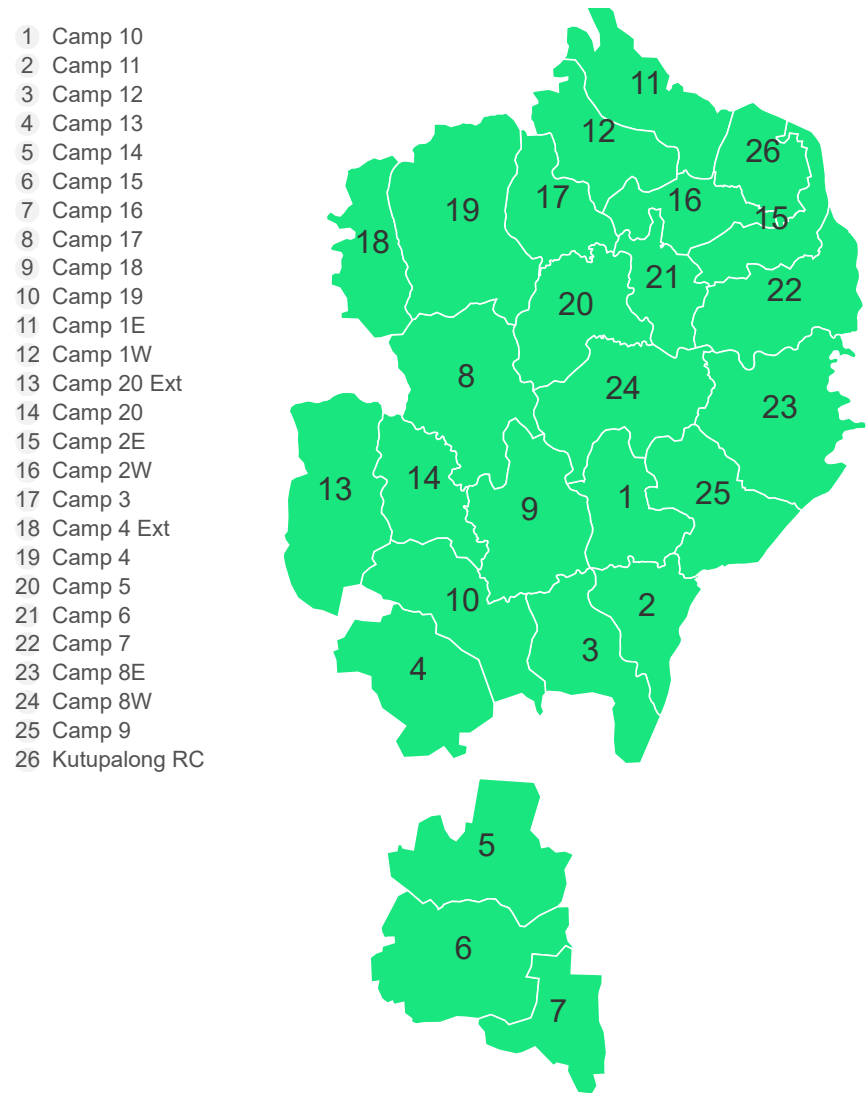
W45	Cumulative (2022)	
127	7141	Number of weekly reports received
81%	92%	Completeness
81%	91%	Timeliness

Table 3 Alert performance indicators

W45	Cumulative (2022)	
98	4,146	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 2021.

Map 1a | Ukhia completeness by camp



Map 1b | Teknaf completeness by camp

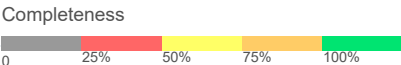
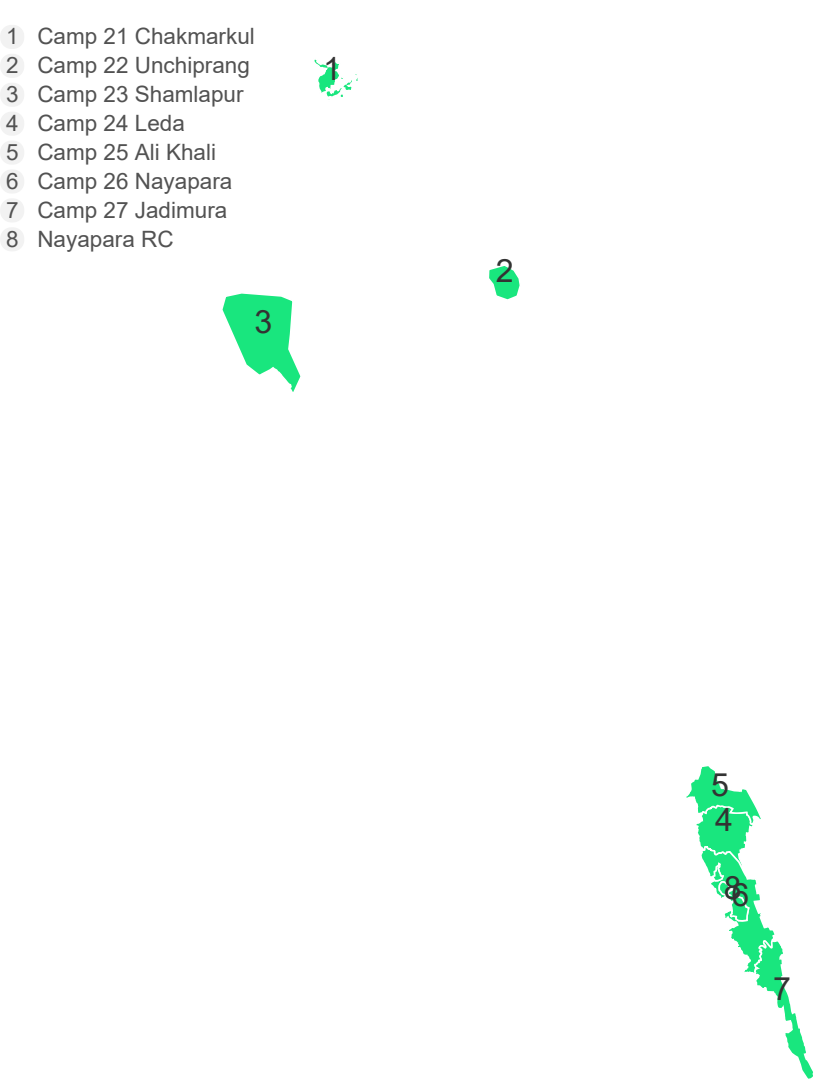
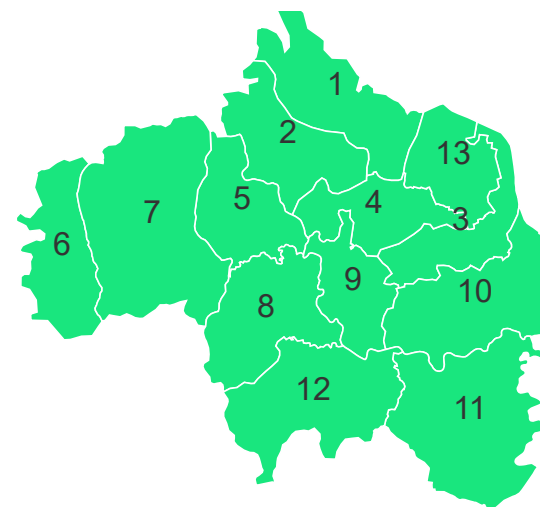


Table 4 | Performance by camp (W45 2022)

Northern group	Reporting		Performance	
	# health facilities	# reports received	Completeness	Timeliness
Ukhia Northern Group				
Camp 1E	3	3	100%	0%
Camp 1W	5	4	80%	0%
Camp 2E	3	2	100%	0%
Camp 2W	3	3	100%	0%
Camp 3	5	4	100%	0%
Camp 4	5	5	100%	0%
Camp 4 Ext	1	1	100%	0%
Camp 5	5	5	100%	0%
Camp 6	3	3	100%	0%
Camp 7	6	2	50%	0%
Camp 8E	8	4	63%	0%
Camp 8W	4	4	100%	0%
Kutupalong RC	2	2	100%	0%

Map 2 | Completeness 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



Completeness



Table 5 | Performance by camp (W45 2022)

Southern group	Reporting		Performance	
	# health facilities	# reports received	Completeness	Timeliness
Ukhia Southern Group				
Camp 10	4	2	75%	0%
Camp 11	8	6	75%	0%
Camp 12	6	4	67%	0%
Camp 13	10	7	80%	0%
Camp 14	7	4	71%	0%
Camp 15	9	7	89%	11%
Camp 16	7	6	86%	0%
Camp 17	5	5	100%	0%
Camp 18	5	4	80%	0%
Camp 19	5	4	80%	0%
Camp 20	4	1	50%	0%
Camp 20 Ext	3	3	100%	0%
Camp 9	6	4	83%	0%

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

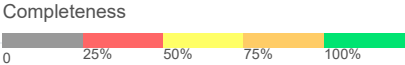
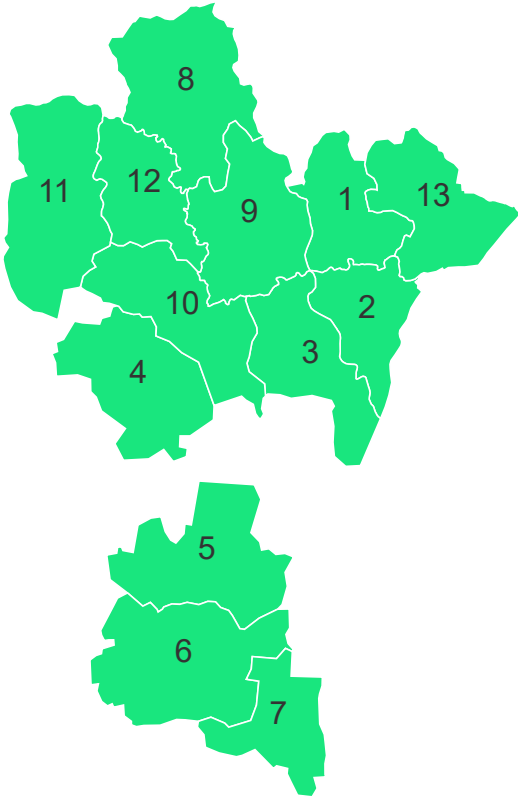


Table 6 | Performance by camp (W45 2022)

Teknaf	Reporting		Performance	
	# health facilities	# reports received	Completeness	Timeliness
Ukhia Teknaf				
Camp 21 Chakmarkul	4	4	75%	0%
Camp 22 Unchiprang	5	3	60%	0%
Camp 23 Shamlapur	3	2	67%	0%
Camp 24 Leda	2	1	100%	0%
Camp 25 Ali Khali	3	3	100%	0%
Camp 26 Nayapara	5	5	100%	0%
Camp 27 Jadimura	2	2	100%	0%
Nayapara RC	2	1	100%	0%

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

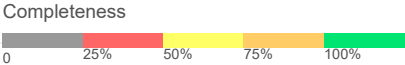
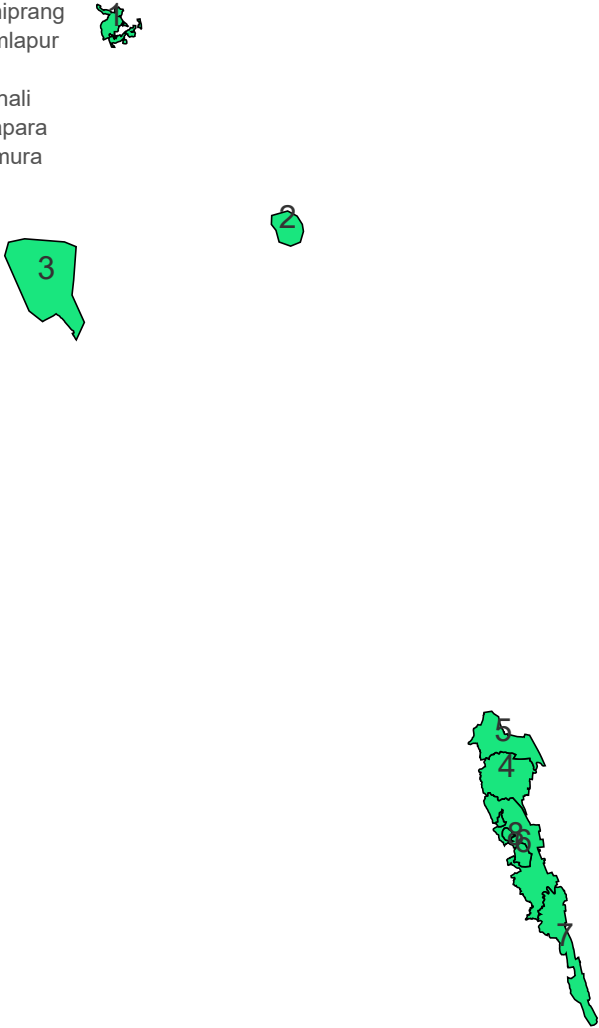


Table 7 | Performance by partner (W45 2022)

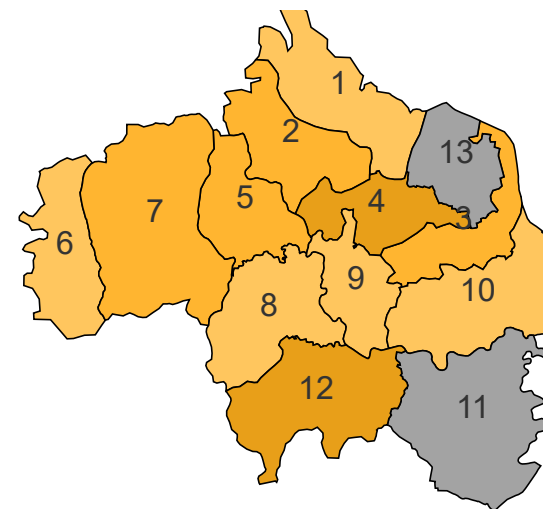
Partner	Performance		Reporting		Partner	Performance		Reporting	
	# sites	# reports received	Completeness	Timeliness		# sites	# reports received	Completeness	Timeliness
AKF	1	0	0%	0%	IRC	4	3	0%	0%
AWARD	6	5	83%	83%	MSF	9	8	0%	0%
BASHMAH	1	1	100%	100%	MoH	12	9	0%	0%
BDRCS	11	11	100%	100%	MHI	0	0		
BRAC	0	11	100%	100%	Medair	0	0		
CARE	4	0	0%	0%	FH/MTI	4	4	0%	0%
GH/CPI	1	1	100%	100%	PRANTIC	1	1	100%	100%
DBC	1	1	100%	100%	PULSE	1	1	100%	100%
DSK	1	1	0%	0%	QC	1	0	0%	0%
DCHT-PWJ	1	1	100%	100%	PHD	10	10	0%	0%
FRNDS	6	0	0%	0%	RPN	2	2	100%	100%
GK	10	10	0%	0%	RHU	3	3	100%	0%
Global One	1	1	100%	100%	RI	3	3	0%	0%
GUSS	1	1	100%	100%	RTMI	9	8	0%	0%
HAEFA	2	2	100%	100%	SALT	1	0	0%	0%
HAIB	8	0	0%	0%	SCI	7	7	0%	0%
HMBDF	2	2	0%	0%	DCHT-MM	1	1	100%	100%
HOPE	1	1	100%	100%	Turkish Government	1	1	100%	100%
ICRC	1	1	100%	100%	TdH	2	2	0%	0%
IOM	23	22	0%	0%					

Table 8 | Performance by camp

Northern group	W45		Cumulative (2022)	
	# alerts	% verif.	# alerts	% verif.
Alerts Northern group				
Camp 1E	1	100%	79	100%
Camp 1W	5	100%	201	100%
Camp 2E	4	100%	415	100%
Camp 2W	6	100%	140	100%
Camp 3	3	100%	187	100%
Camp 4	3	100%	163	100%
Camp 4 Ext	1	100%	62	100%
Camp 5	1	100%	132	100%
Camp 6	2	100%	103	100%
Camp 7	2	100%	91	100%
Camp 8E	0	0%	78	100%
Camp 8W	7	100%	222	100%
Kutupalong RC	0	0%	76	100%

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

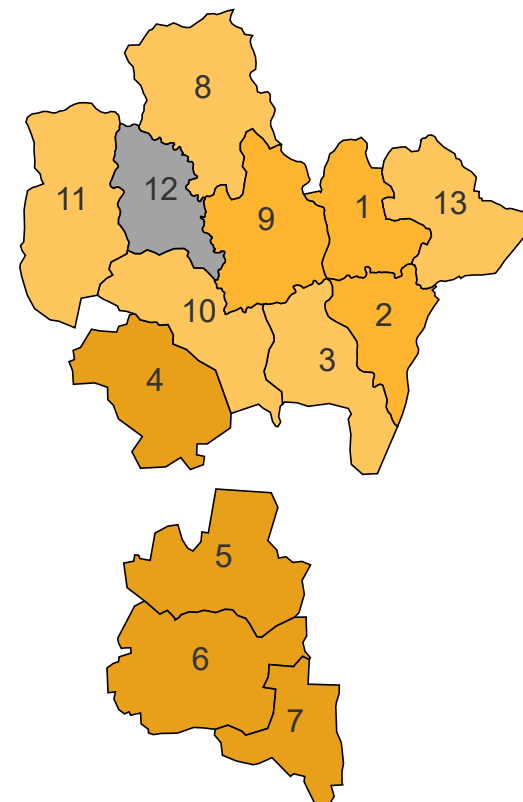


Table 9 | Performance by camp

Southern group	W45		Cumulative (2022)	
	# alerts	% verif.	# alerts	% verif.
Alerts Northern group				
Camp 10	3	100%	95	100%
Camp 11	5	100%	121	100%
Camp 12	2	100%	133	100%
Camp 13	6	100%	151	100%
Camp 14	7	100%	86	100%
Camp 15	6	100%	158	100%
Camp 16	6	100%	128	100%
Camp 17	2	100%	109	100%
Camp 18	3	100%	177	100%
Camp 19	1	100%	69	100%
Camp 20	0	0%	73	100%
Camp 20 Ext	2	100%	59	100%
Camp 9	1	100%	220	100%

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	W45		Cumulative (2022)	
	# alerts	% verif.	# alerts	% verif.
Alerts Northern group				
Camp 21 Chakmarkul	3	100%	57	100%
Camp 22 Unchiprang	0	0%	73	100%
Camp 23 Shamlapur	0	0%	16	100%
Camp 24 Leda	4	100%	111	100%
Camp 25 Ali Khali	1	100%	36	100%
Camp 26 Nayapara	4	100%	137	100%
Camp 27 Jadimura	2	100%	67	100%
Nayapara RC	2	100%	40	100%

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

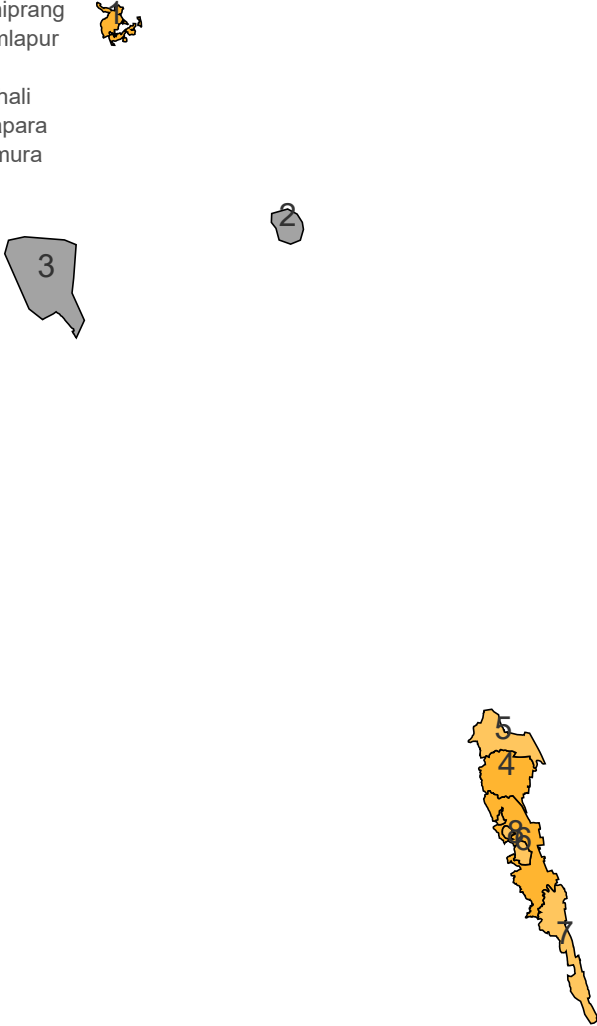


Table 11 | Performance by type of alert

Event	W45		Cumulative (2022)	
	# alerts	% verif.	# alerts	% verif.
Indicator-based surveillance				
Malaria	0	0%	3	100%
Measles	15	100%	452	100%
Bloody Diarr.	0	0%	0	0%
AFP	0	0%	33	100%
Meningitis	1	100%	27	100%
Haem. fever (susp.)	2	100%	41	100%
NNT	0	0%	3	100%
Unexp. fever	4	100%	130	100%
AWD	4	100%	208	100%
ARI	5	100%	183	100%
AJS	0	0%	104	100%
Varicella (Susp.)	0	0%	107	100%
Suspected COVID-19	0	0%	0	0%
Event-based surveillance				
EBS total	1	100%	214	100%

Table 12 | Risk assessment

W45	Cumulative (2022)	
0	9	Low risk
0	1	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. Feroz Hayat Khan
National Professional Officer (Disease Surveillance &
Epidemiology)
World Health Organization
Cox's Bazar, Bangladesh
Telephone: +88 017 0120 2994
Email: khan@who.int

Notes

WHO and the Ministry of Health and Family Welfare gratefully acknowledge all partners who have reported the data used in this bulletin.

The data been collected with support from the EWARS project. This is an initiative to strengthen early warning, alert and response in emergencies. It includes an online, desktop and mobile application that can be rapidly configured and deployed in the field. It is designed with frontline users in mind, and built to work in difficult and remote operating environments. This bulletin has been automatically published from the EWARS application.

More information can be found at <http://ewars-project.org>

Sign up for an account with EWARS Bangladesh at <http://bd.ewars.ws>



Ministry of
Health and
Family
Welfare
Bangladesh



World Health
Organization



HEALTH SECTOR
COX'S BAZAR



Global
EWARS

Bangladesh

Rohingya Emergency Response

Early Warning, Alert and
Response System (EWARS)

Annex W45 2022



Ministry of Health and Family
Welfare Bangladesh



World Health
Organization



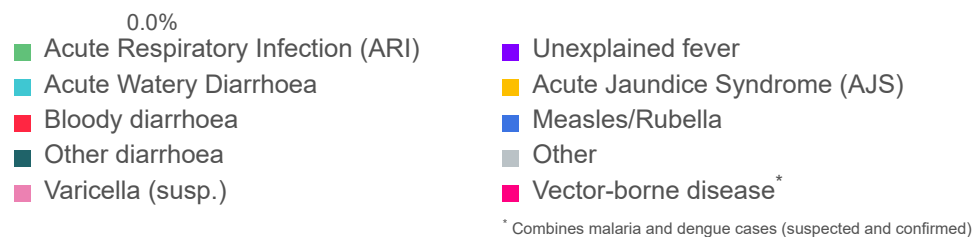
HEALTH SECTOR
COX'S BAZAR



Printed: 03:25 Wednesday, 09 November 2022 UTC

Proportional morbidity

Figure 1 | Proportional morbidity (W45 2022)



Disease	W45		2022	
	# cases	% morbidity	# cases	% morbidity
AWD	2,926	3.0%	128,597	2.8%
Bloody diarr.	254	0.3%	15,929	0.3%
Other diarr.	1,078	1.1%	49,473	1.1%
Susp. Varicella	23	0.0%	9,095	0.2%
ARI	15,644	16.2%	828,539	17.8%
Measles/Rub.	16	0.0%	961	0.0%
AFP	0	0.0%	70	0.0%
Susp. menin.	4	0.0%	171	0.0%
AJS	7	0.0%	1,141	0.0%
Susp. HF	22	0.0%	392	0.0%
Neo. tetanus	0	0.0%	9	0.0%
Adult tetanus	0	0.0%	14	0.0%
Malaria (conf.)	2	0.0%	377	0.0%
Malaria (susp.)	6	0.0%	53,051	1.1%
Dengue (conf.)	180	0.2%	18,983	0.4%
Dengue (susp.)	62	0.1%	8,331	0.2%
Unexpl. fever	738	0.8%	54,283	1.2%
Sev. Malnut.	32	0.0%	2,164	0.0%
Inj./Wounds	2,239	2.3%	97,610	2.1%
Other	73,199	75.9%	3,376,046	72.6%
Total	95,745	100%	4,652,901	100%

Trend in consultations and key diseases

Figure 2 | Trend in proportional morbidity for key diseases (W45)

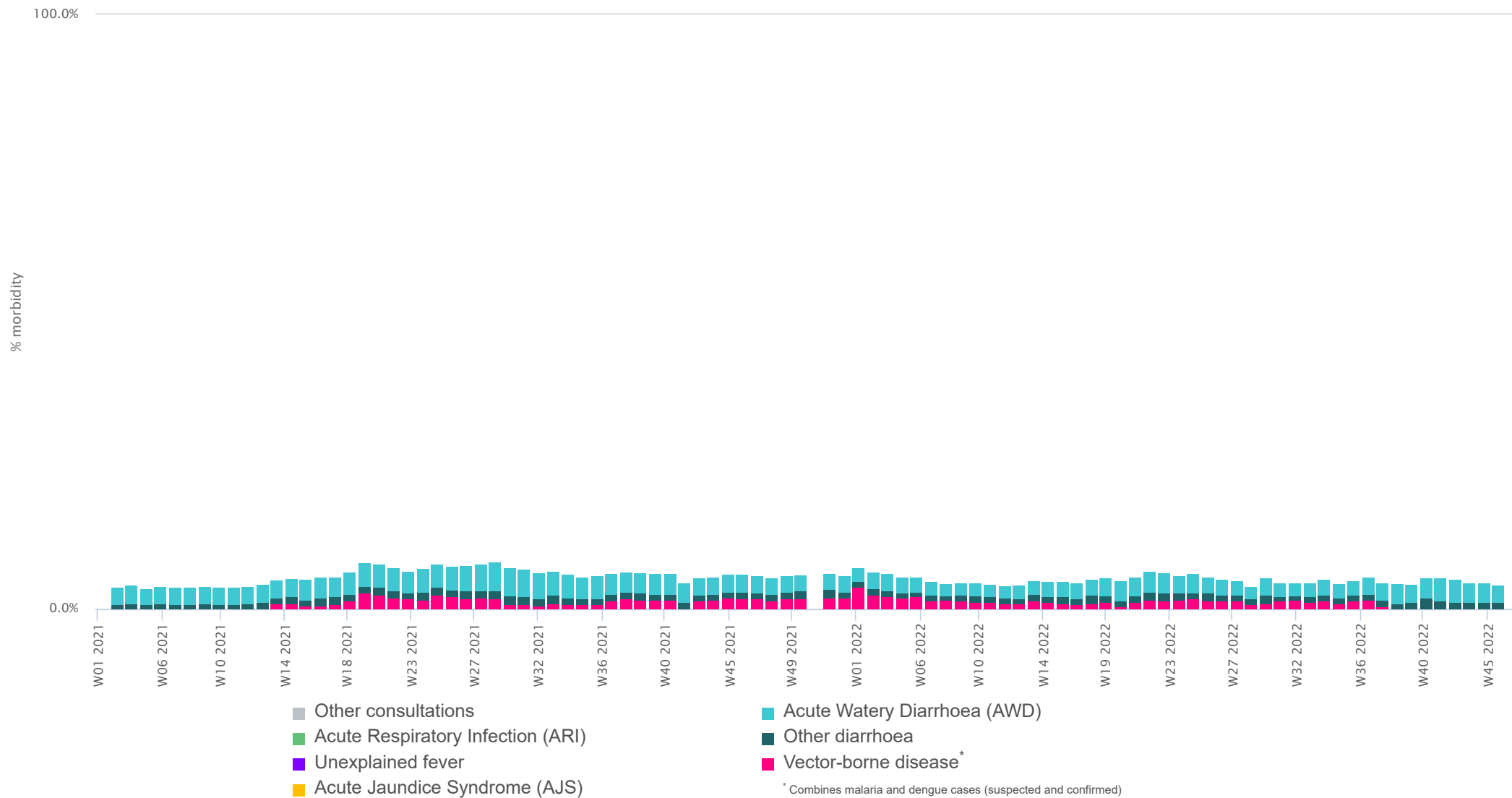
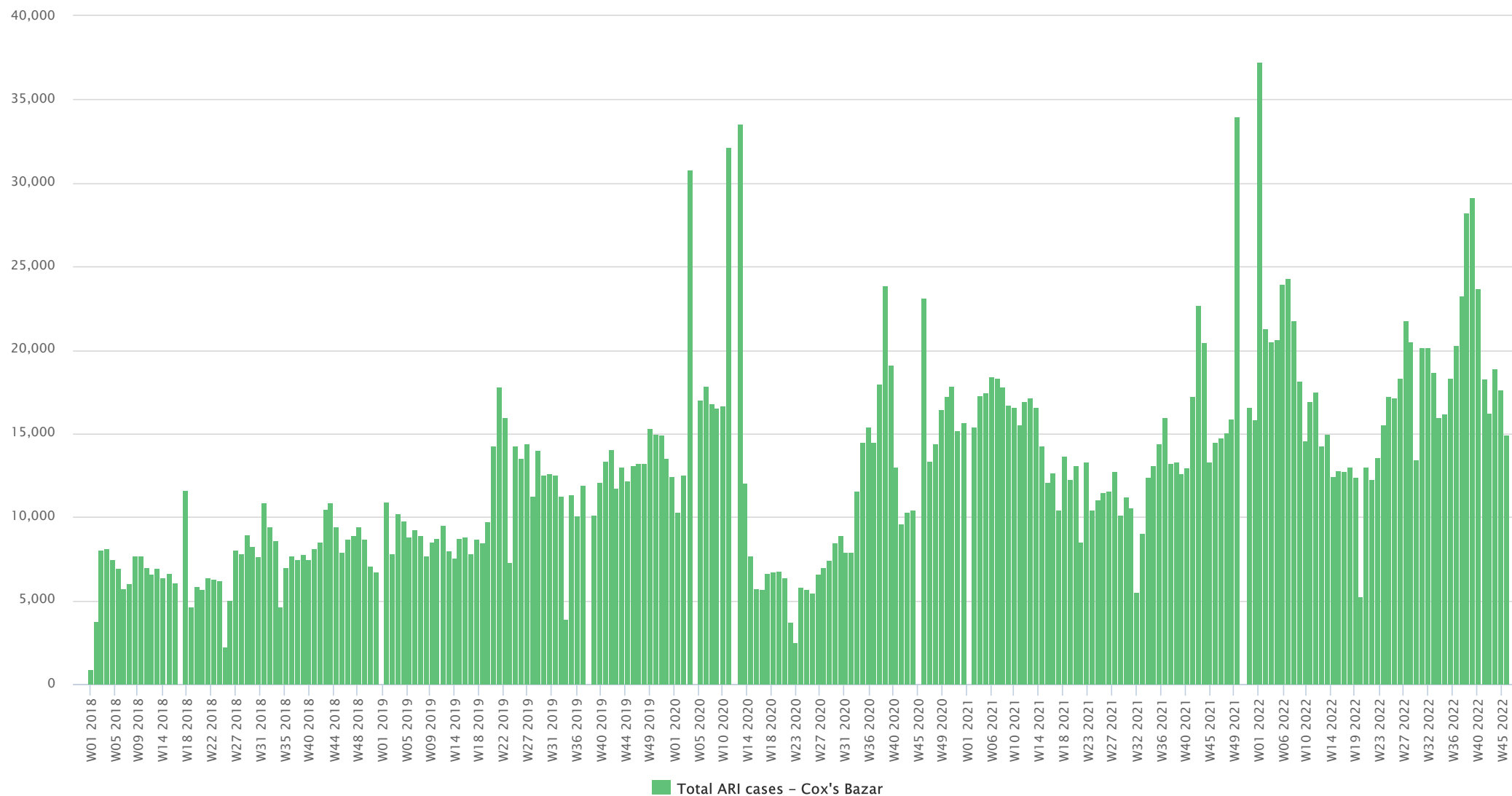
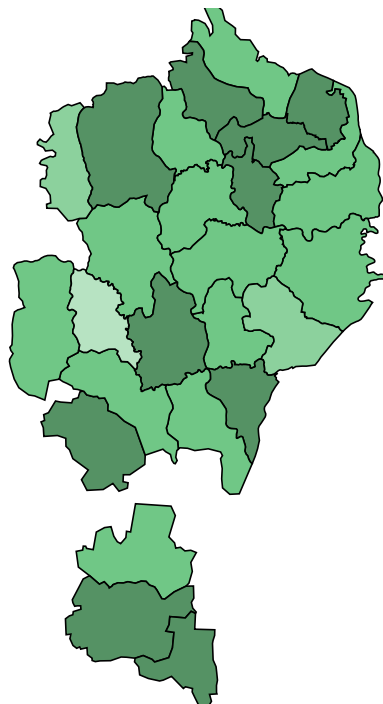


Figure 3 | Trend in number of cases over time (W38 2017 - W45 2022)

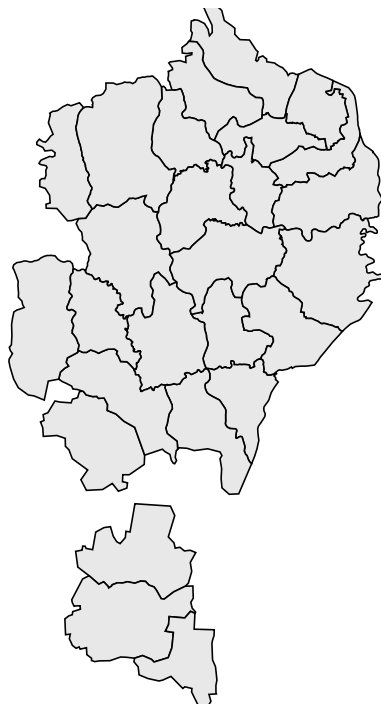


Map 1 | Map of cases by camp (W45 2022)

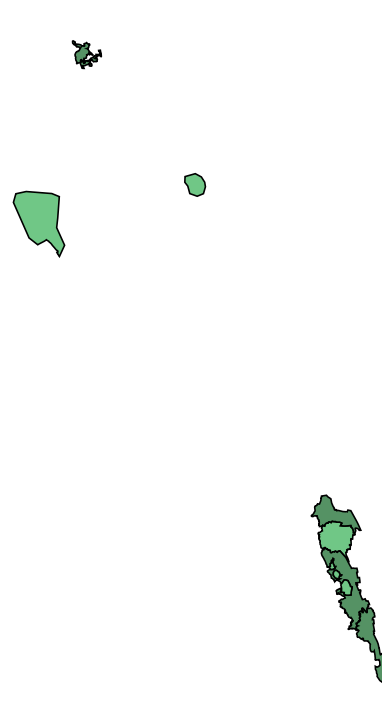
a. Ukhia | Number of cases



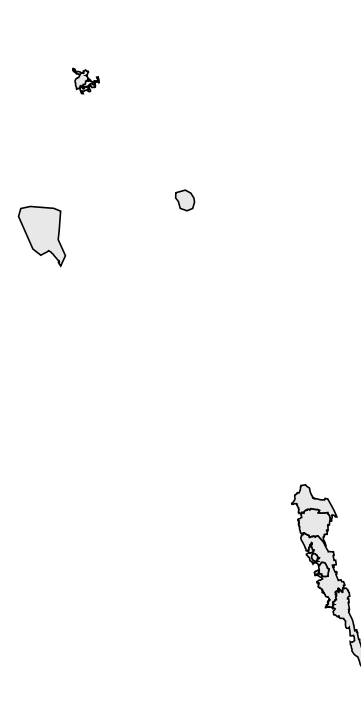
b. Ukhia | Number of alerts



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 (W45 2022)

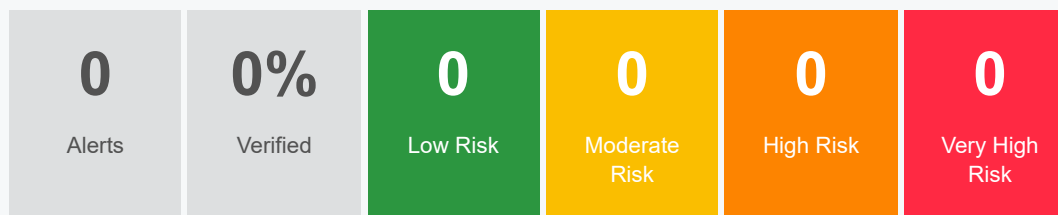
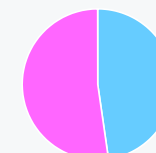
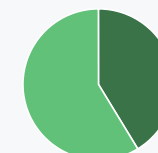


Figure | % sex



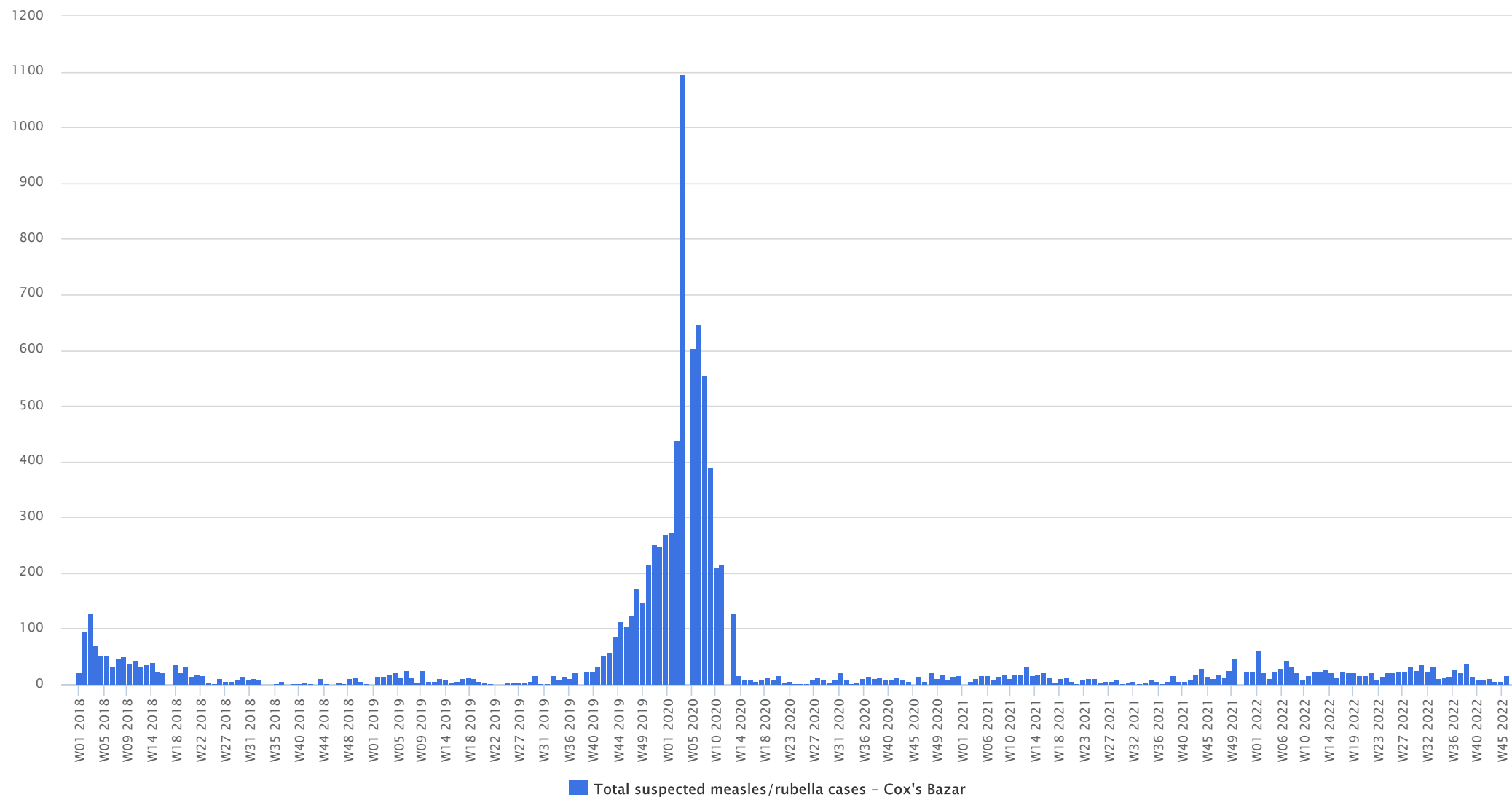
Male Female

Figure | % age



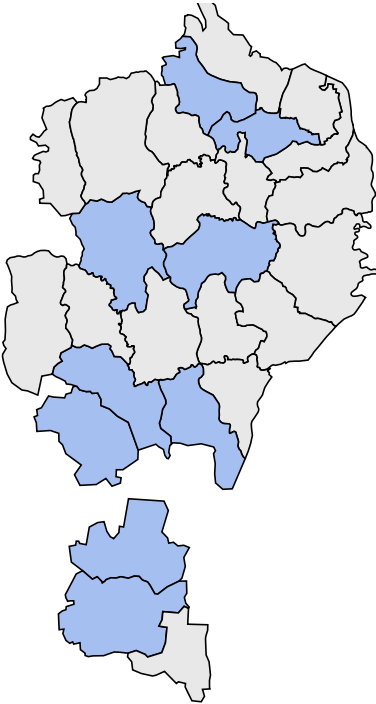
>=5 < 5

Figure 4 | Trend in number of suspected cases over time (W38 2017 - W45 2022)

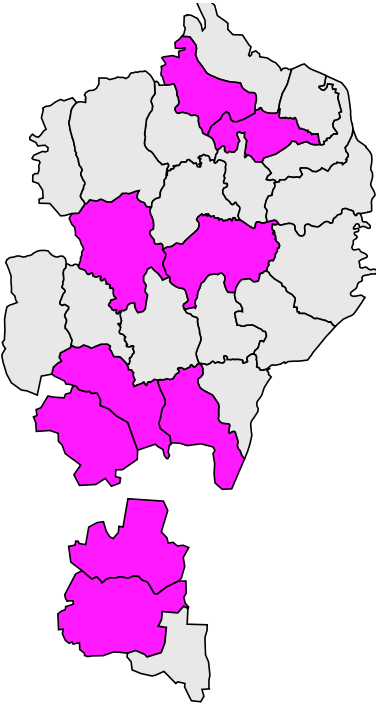


Map 2 | Map of cases by camp (W45 2022)

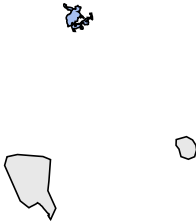
a. Ukhia | Number of cases



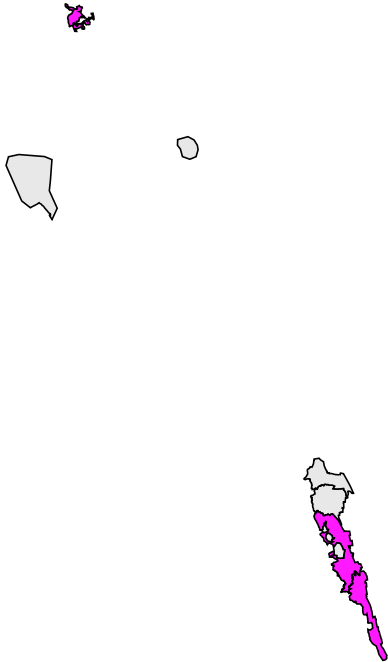
b. Ukhia | Number of alerts



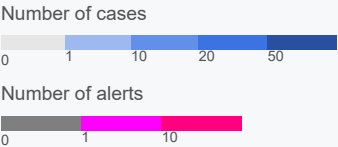
c. Teknaf | Number of cases



d. Teknaf | Number of alerts



Map legend



Alert threshold
1 case. Source: IEDCR

Alert management (W45 2022)

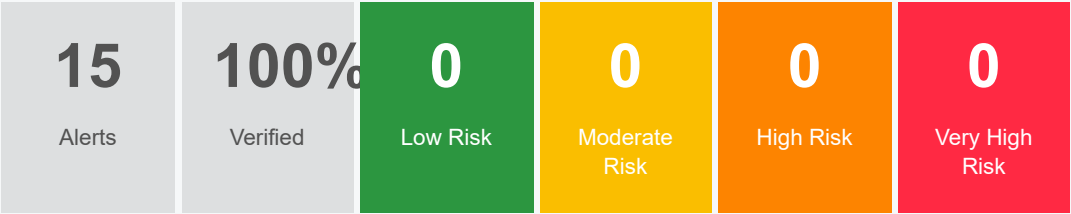


Figure | % sex

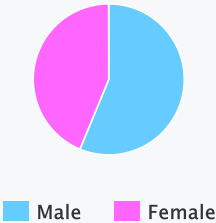


Figure | % age

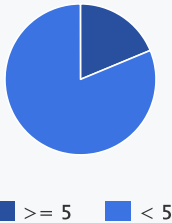
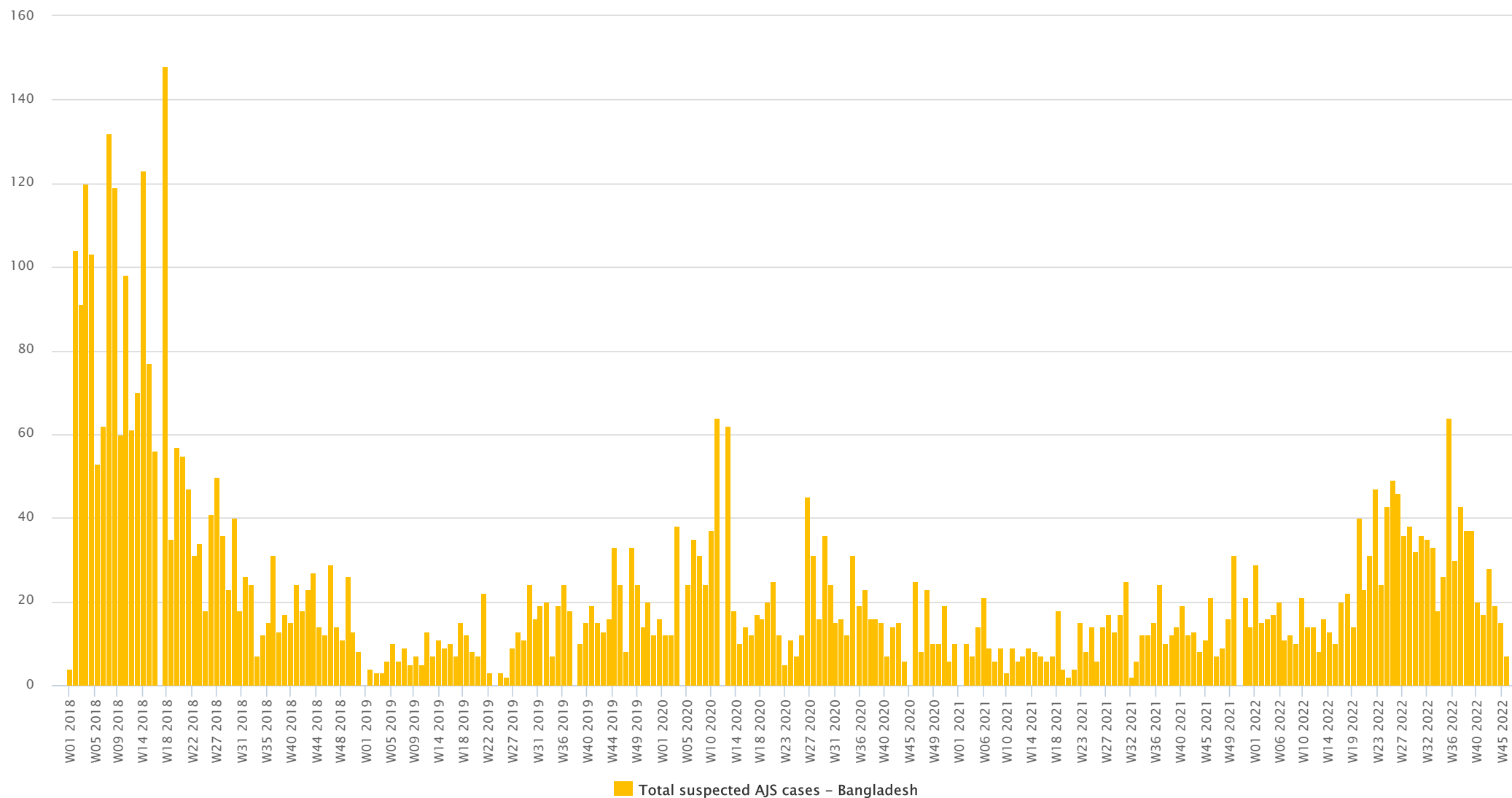
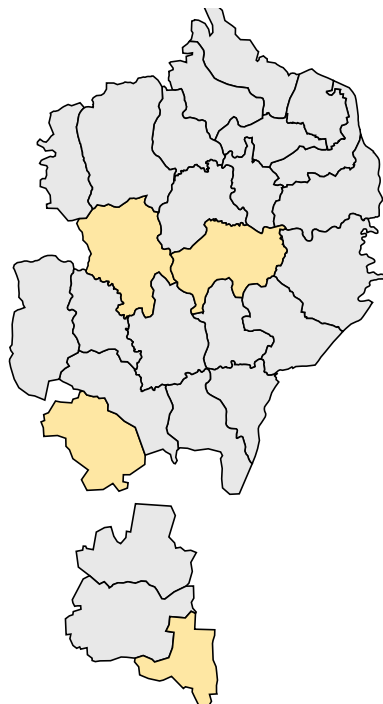


Figure 5 | Trend in number of cases over time (W38 2017 - W45 2022)

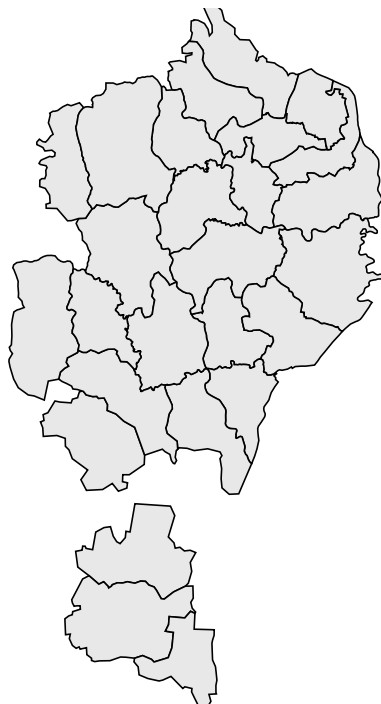


Map 3 | Map of cases by camp (W37 2017 - W45 2022)

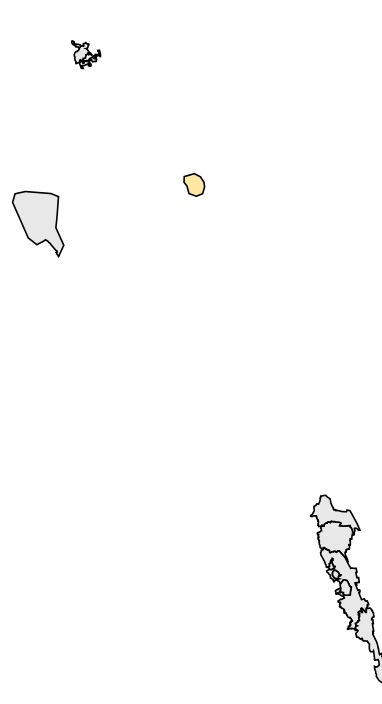
a. Ukhia | Number of cases



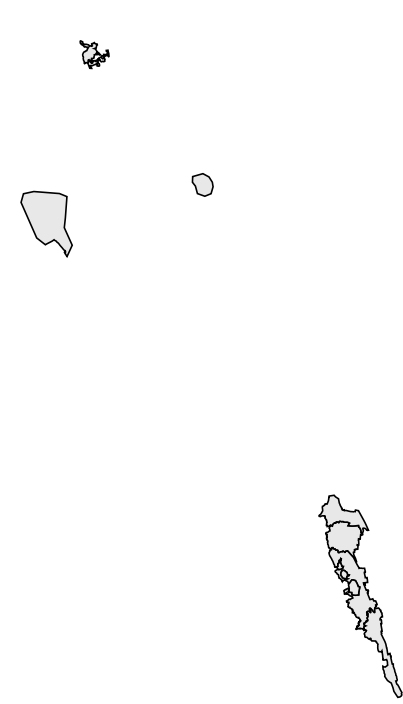
b. Ukhia | Number of alerts



c. Teknaf | Number of cases

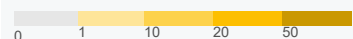


d. Teknaf | Number of alerts



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 (W45 2022)

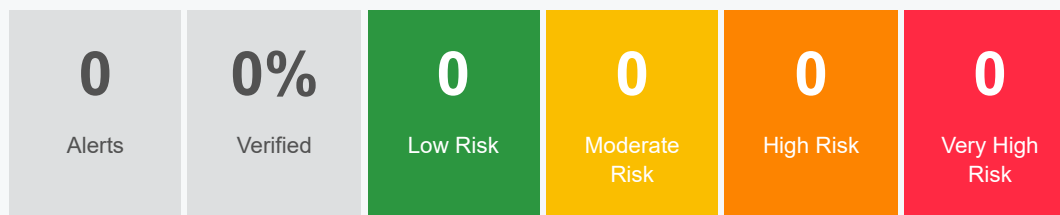
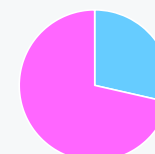
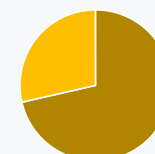


Figure | % sex



Male Female

Figure | % age



>= 5 < 5

Figure 6 | Trend in number of cases over time (W38 2017 - W45 2022)

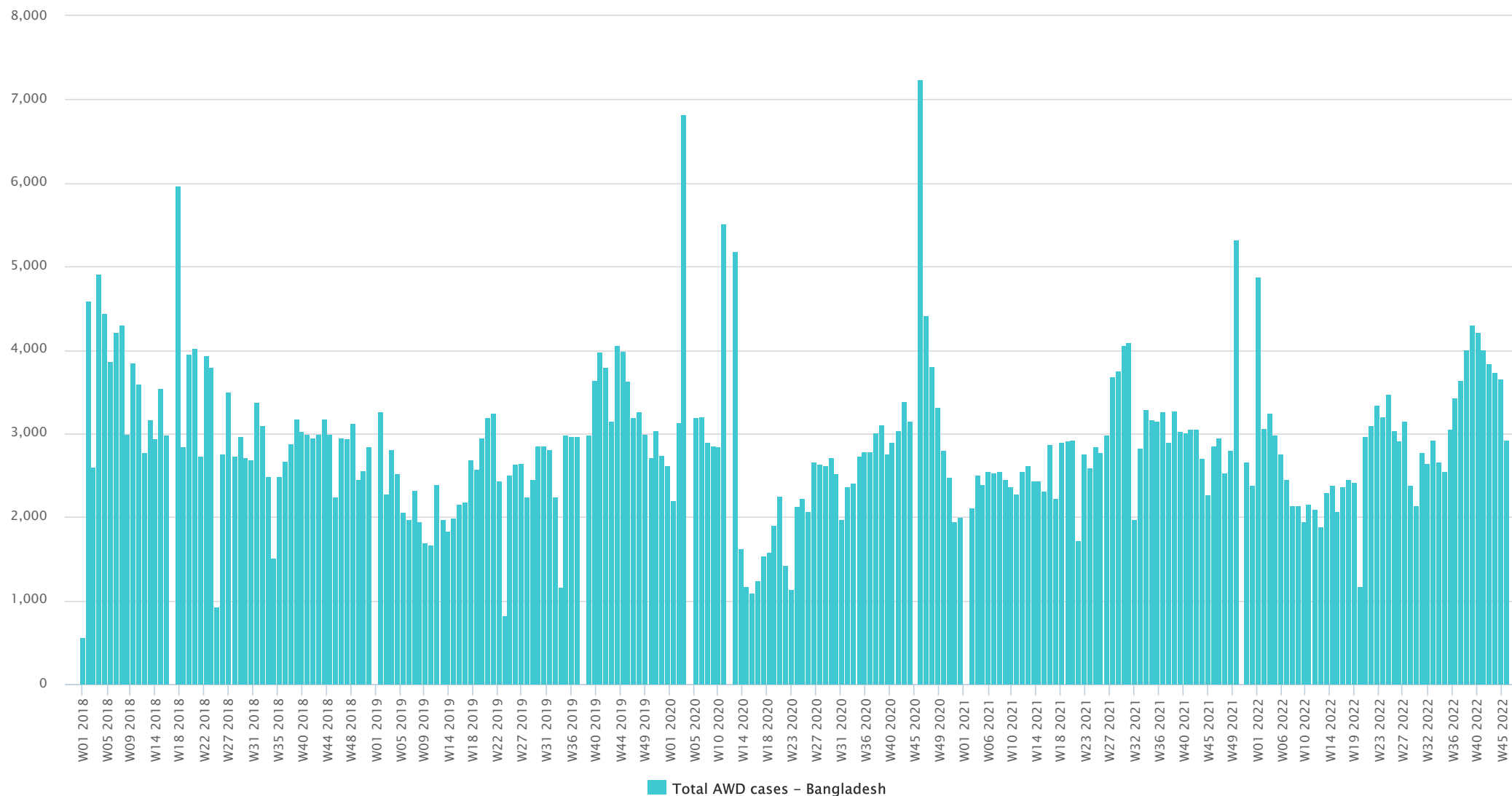
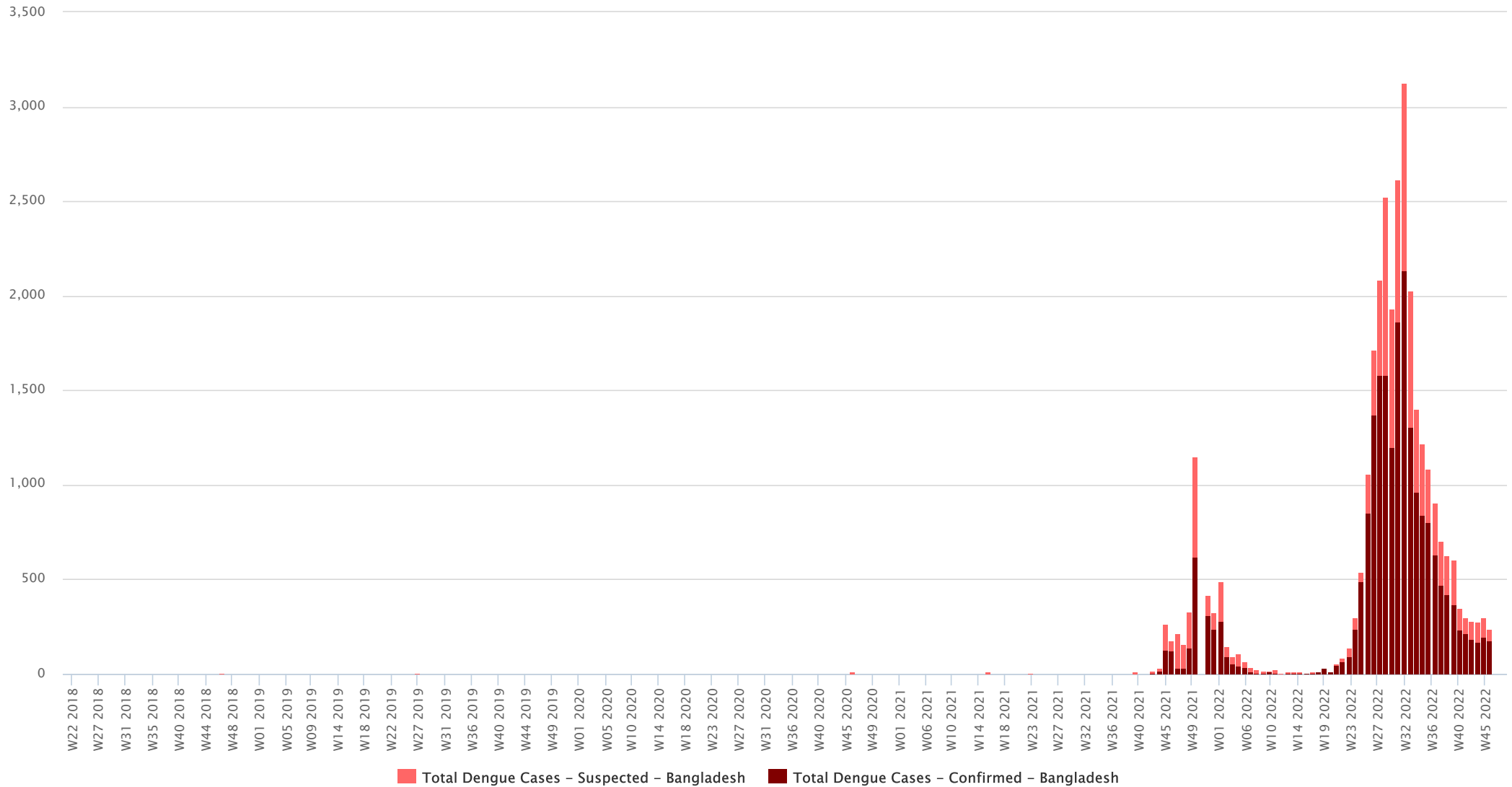
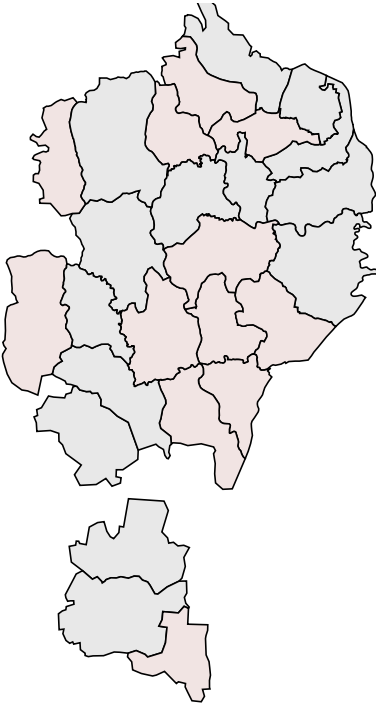


Figure 7 | Trend in number of cases over time (W38 2017 - W45 2022)

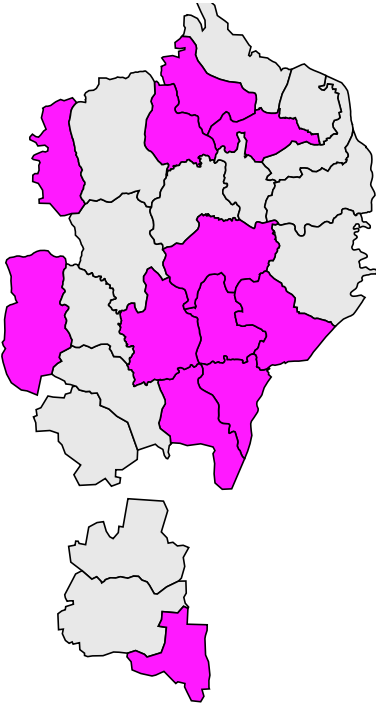


Map 4 | Map of cases by camp (W37 2017 - W45 2022)

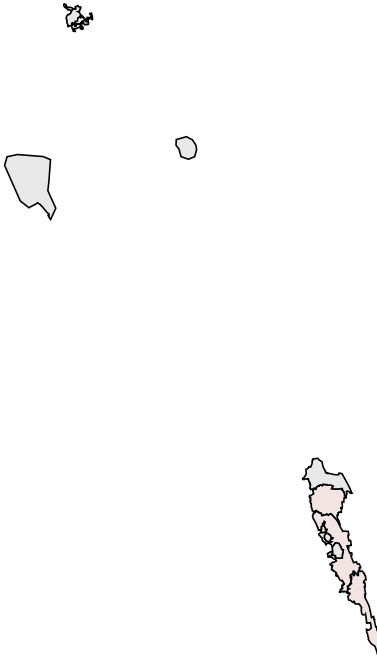
a. Ukhia | Number of cases



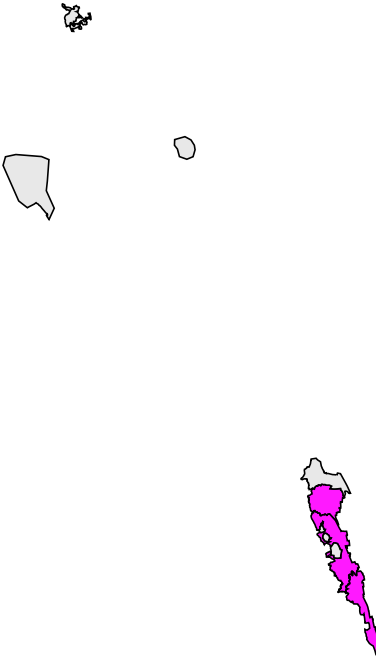
b. Ukhia | Number of alerts



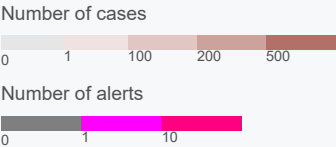
c. Teknaf | Number of cases



d. Teknaf | Number of alerts



Map legend



Alert threshold

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

Alert management (W45 2022)

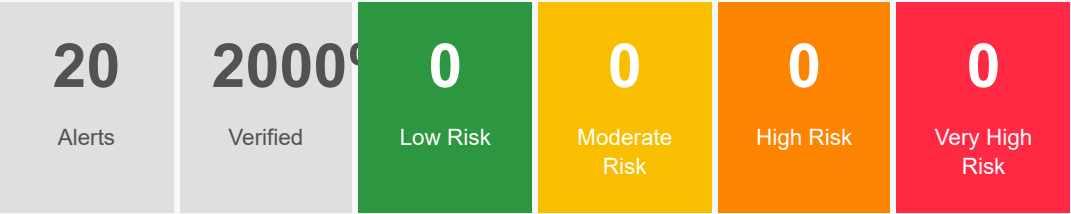


Figure | % sex

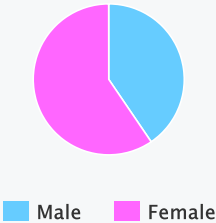


Figure | % age

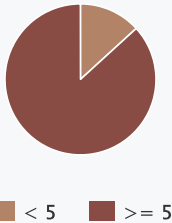
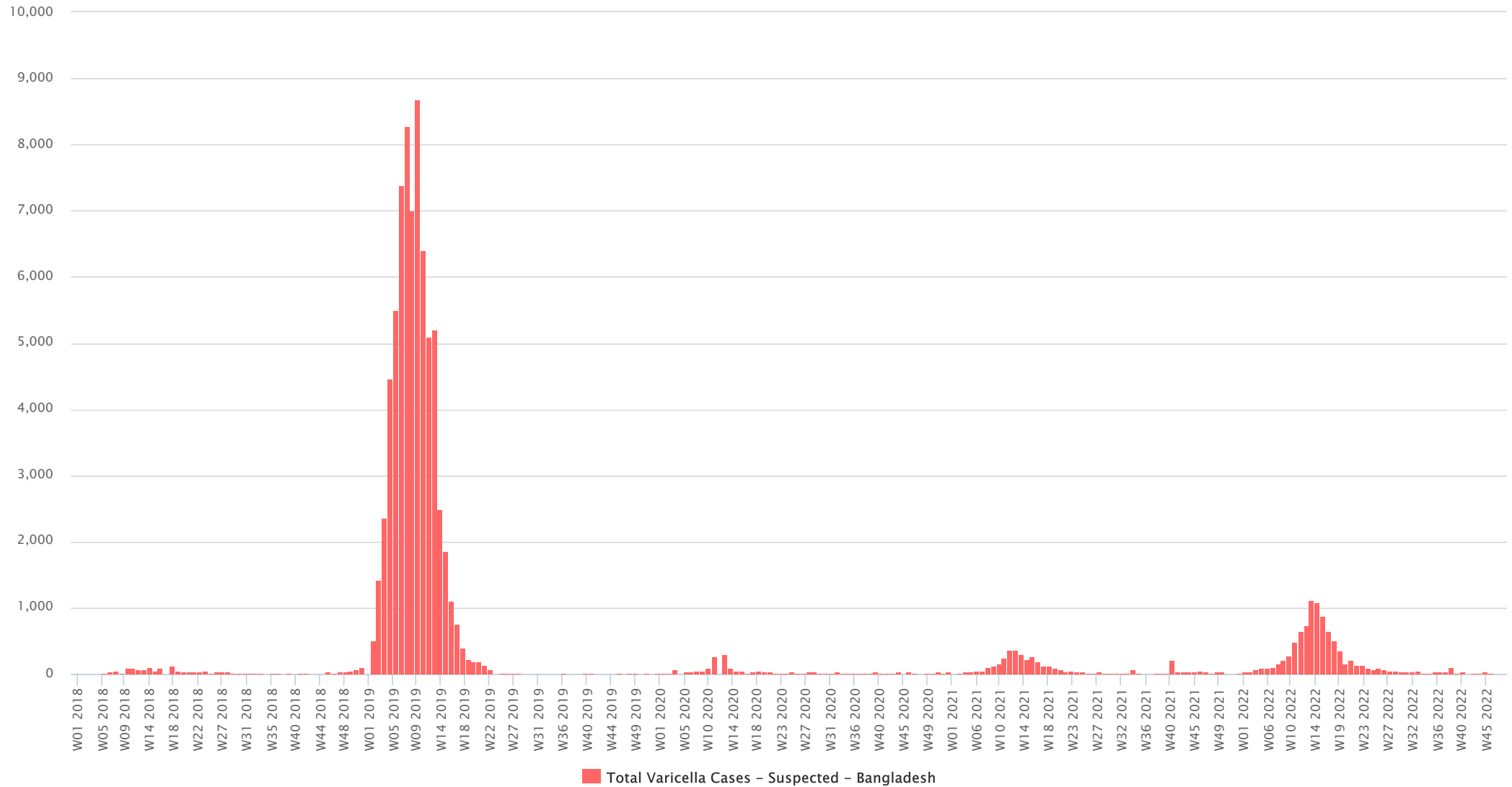
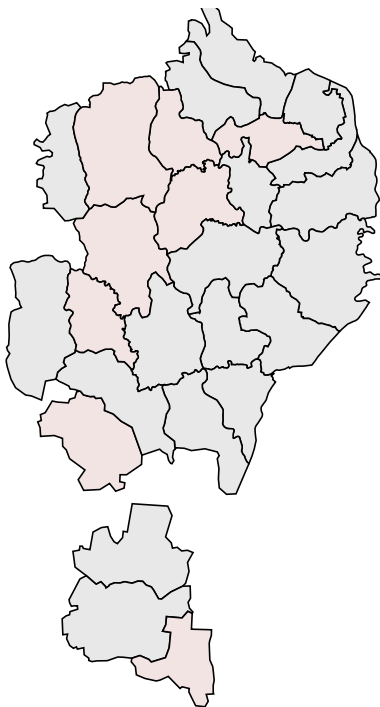


Figure 7 | Trend in number of cases over time (W38 2017 - W45 2022)

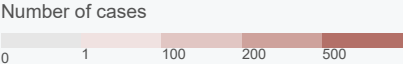


Map 4 | Map of cases by camp (W37 2017 - W45 2022)

a. Ukhia | Number of cases



Map legend



c. Teknaf | Number of cases

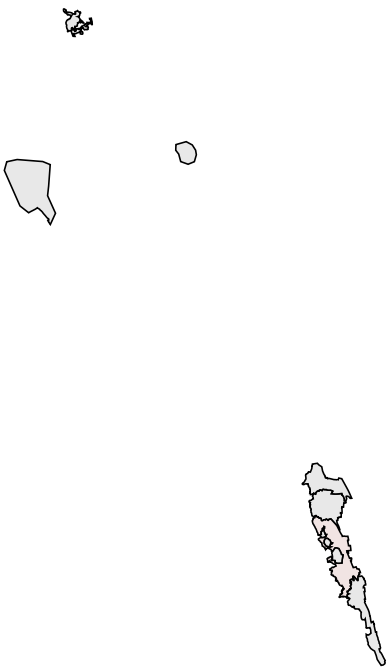


Figure | % sex

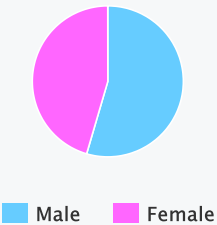
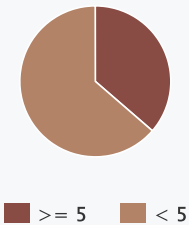


Figure | % age



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. Feroz Hayat Khan
National Professional Officer (Disease Surveillance &
Epidemiology)
World Health Organization
Cox's Bazar, Bangladesh
Telephone: +88 017 0120 2994
Email: khan@who.int

Notes

WHO and the Ministry of Health and Family Welfare gratefully acknowledge all partners who have reported the data used in this bulletin.

The data been collected with support from the EWARS project. This is an initiative to strengthen early warning, alert and response in emergencies. It includes an online, desktop and mobile application that can be rapidly configured and deployed in the field. It is designed with frontline users in mind, and built to work in difficult and remote operating environments. This bulletin has been automatically published from the EWARS application.

More information can be found at <http://ewars-project.org>

Sign up for an account with EWARS Bangladesh at <http://bd.ewars.ws>



Ministry of
Health and
Family
Welfare
Bangladesh



World Health
Organization



HEALTH SECTOR
COX'S BAZAR



Global

EWARS