South Sudan

Integrated Disease Surveillance and Response (IDSR)

Annexes W38 2019 (Sept. 16 – Sept. 22)

World Health
Organization
South Sudan

Ministry of Health
Republic of South Sudan

Contents

Sources of data

1. Weekly IDSR Reporting Form
2. Weekly EWARS Reporting Form

Access and Utilization | Map of consultations by county

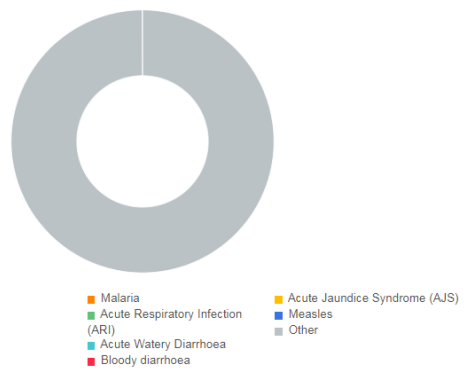**Map 1** | Map of total consultations by county (W38 2019)

Number of consultations
0   1   1,000   2,500   5,000
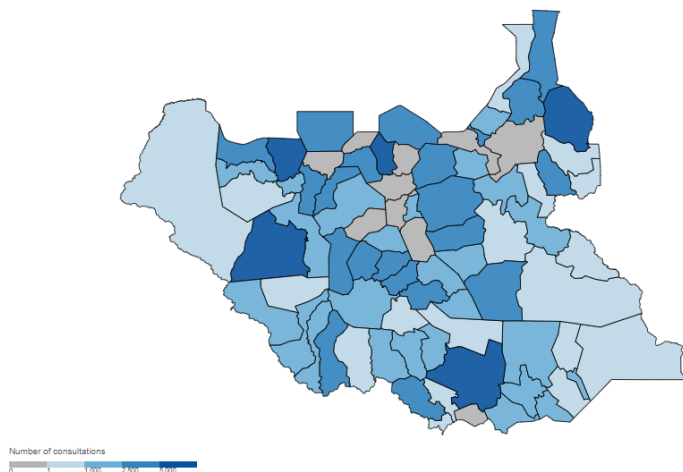
Hub	W38	2019
Aweil	15,313	342,531
Bentiu	20,771	545,337
Bor	25,831	360,390
Juba	15,420	588,282
Kuajok	16,197	481,993
Malakal	22,918	391,384
Rumbek	19,723	720,407
Torit	10,685	430,393
Wau	14,708	336,206
Yambio	14,995	348,329
South Sudan	**176,561**	**4,545,252**

The total consultation in the country since week 1 of 2019 is 4,545,252 by hub, Bor registered the highest number of consultations as indicated in the table above. The total number of consultations by county is shown in the map above. See the key for more information.

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Proportional mortality

Figure 1 | Proportional mortality (2019)

Legend:
- ■ Malaria
- ■ Acute Respiratory Infection (ARI)
- ■ Acute Watery Diarrhoea
- ■ Bloody diarrhoea
- ■ Acute Jaundice Syndrome (AJS)
- ■ Measles
- ■ Other

Syndrome	W38		2019	
	# deaths	% mortality	# deaths	% mortality
Malaria	204	80.0%	5,120	0.0%
ARI	1	0.4%	2,035	0.0%
AWD	17	6.7%	1,910	0.0%
Bloody diarrhoea	1	0.4%	347	0.0%
AJS	0	0.0%	212	0.0%
Measles	6	2.4%	103	0.0%
Other	26	10.2%	7,009,641,893	100.0%
Total deaths	**255**	**100%**	**7,009,651,620**	**100%**

Figure 1, above shows the proportional mortality for 2019, with malaria being the main cause of mortality accounting for 80.0% of the deaths since week 1 of 2019, followed by ARI, AWD and ABD
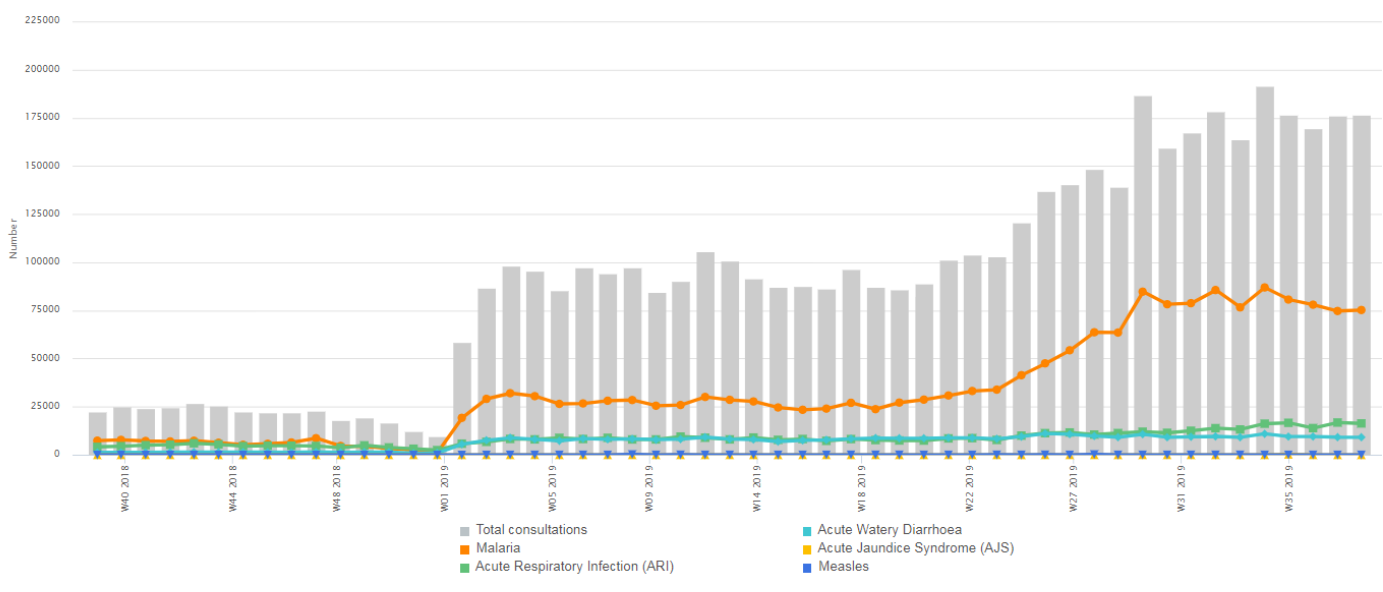
Proportional morbidity

Figure 2 | Proportional morbidity (2019)

Legend:
- ■ Malaria
- ■ Acute Respiratory Infection (ARI)
- ■ Acute Watery Diarrhoea
- ■ Bloody diarrhoea
- ■ Acute Jaundice Syndrome (AJS)
- ■ Measles
- ■ Other
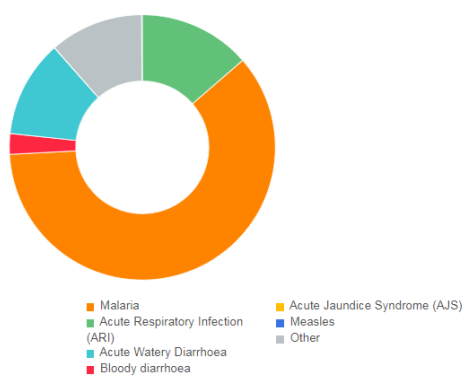
| Syndrome	W38		2019	
	# cases	% morbidity	# cases	% morbidity
Malaria	75,220	68.0%	1,705,158	60.5%
ARI	16,348	14.8%	383,722	13.6%
AWD	9,168	8.3%	333,435	11.8%
Bloody diarrhoea	1,141	1.0%	70,817	2.5%
AJS	0	0.0%	527	0.0%
Measles	37	0.0%	1,998	0.1%
Other	8,672	7.8%	320,939	11.4%
Total cases	**110,586**	**100%**	**2,816,596**	**100%**

Figure 2, indicates the top causes of morbidity in the country, with malaria being the leading cause of morbidity 75,220 (68.0%) followed by ARI, AWD and ABD respectively since week 1 of 2019. refer to the figure above for more information.

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Trend in consultations and key diseases

Figure 3 | Trend in total consultations and key diseases (W38)

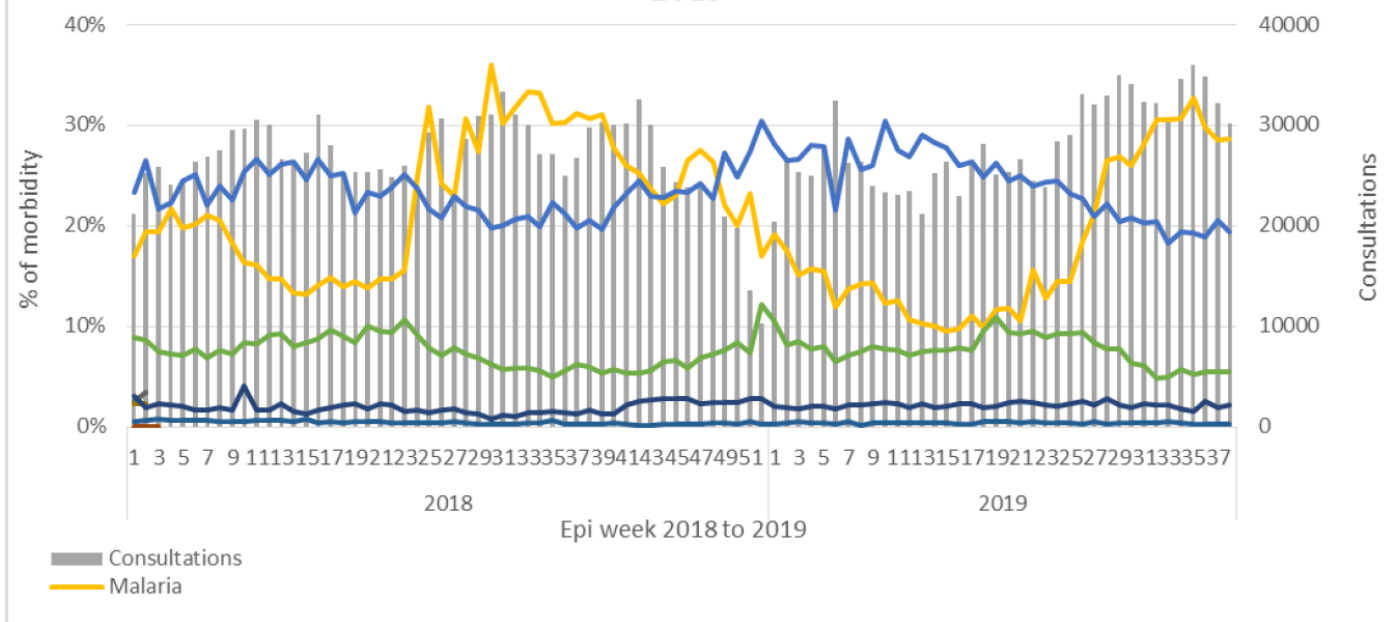# IDSR Proportionate morbidity trends - in relatively stable states

Fig. 1 | IDSR Proportionate morbidity trends, week 1, 2018 to 38, 2019
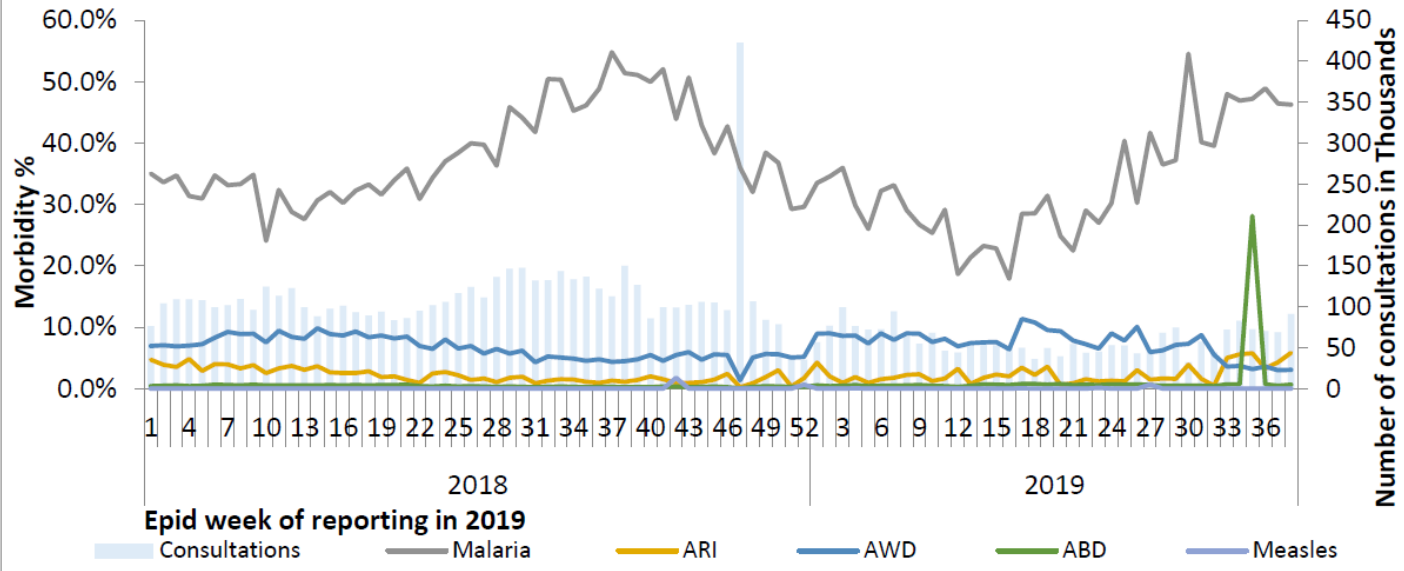
In the relatively stable states, malaria is the top cause of morbidity accounting for 46.3 % of the consultations in week 38 (representing a decrease from 46.4% in week 37).

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## IDP Proportionate morbidity trends - in displaced population

Fig.2| IDP Proportionate morbidity trends, week 01, 2018 to week 38, 2019

Among the IDPs, Malaria and ARI accounted for 29% and 19% of the consultations in week 38. The other significant causes of morbidity in the IDPs includes AWD, Skin diseases, and injuries.
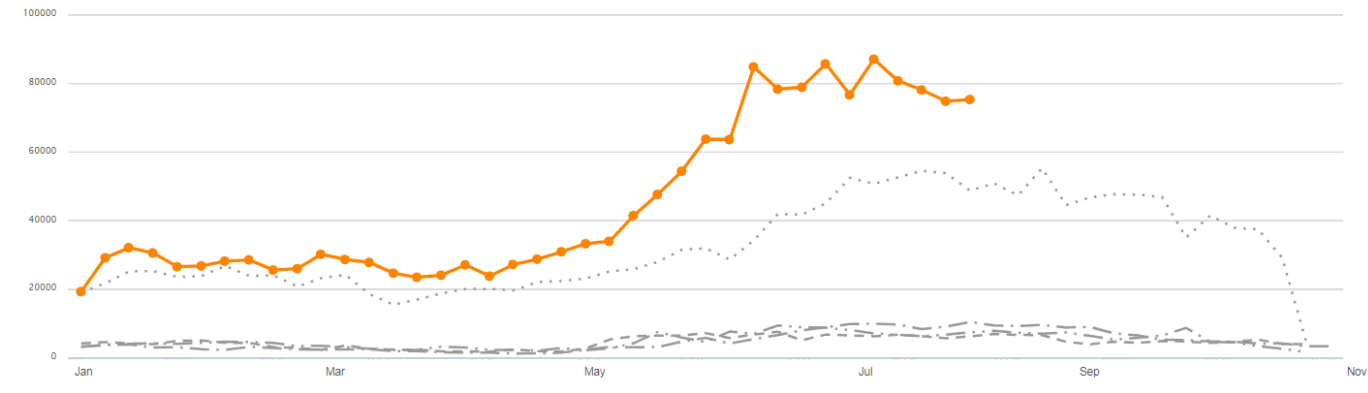
IDP Proportionate morbidity trends - in displaced population

CAUSES OF MORBIDITY AMONG THE IDPS WEEKS 38, 2019
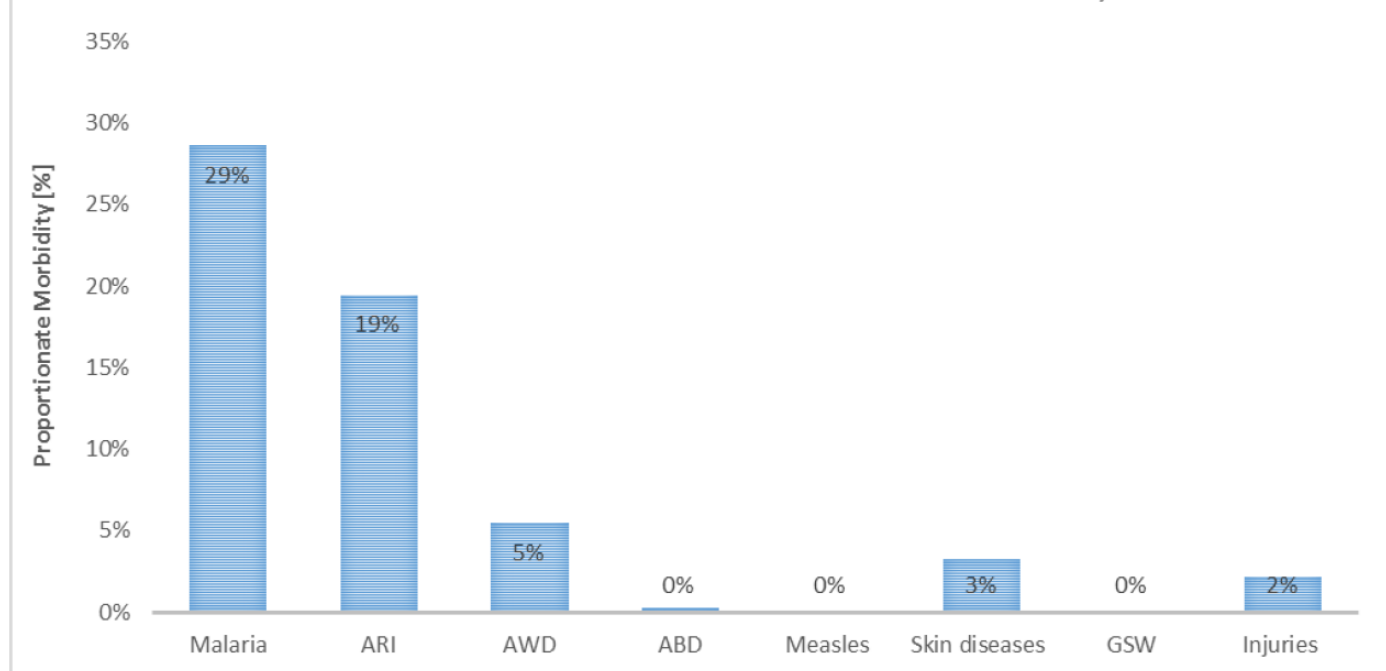
The top causes of morbidity in the IDPs in 2019 include, ARI, Malaria, AWD, Skin diseases, and injuries.

Figure 4a | Trend in number of cases over time (South Sudan)

Graph legend

——	2019
— - — - —	2018
— · — · — ·	2017
— — — —	2016
· · · · · · · · · ·	2015

Key malaria indicators (2019)

1,705,158	**5,120**	**549**
Cases	Deaths	Alerts

Figure 4b | % morbidity

Figure 4c | Age breakdown

Malaria is the top course of Morbidity in the country, a total of 1,705,158 cases with 5,120 deaths registered since week 1 of 2019. malaria trend for week 38 of 2019 remain constant and is above 2015,2016,2017 and 2018 as shown in the figure 4a, above.

Malaria| Maps and Alert Management

Map 2 | Map of malaria cases by county

a. 2014

b. 2015

c. 2016

d. 2017

d. 2018

e. 2019

Map 3 | Map of malaria alerts by county (2019)

Map legend

Number of malaria cases

0   1   10,000   20,000   50,000

Number of malaria alerts

0   10

Alert threshold

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

549	**410**
Alerts	Verified

Risk Assessment

2	**0**	**2**	**10**
Low Risk	Moderate Risk	High Risk	Very High Risk

Since the beginning of the year, a total of 549 malaria alerts have been triggered, 410 of those were verified. The Maps above indicate the location reporting malaria alerts from, 2015, 2016, 2017, 2018, and 2019.

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Figure 5a | Trend in AWD cases over time (South Sudan)
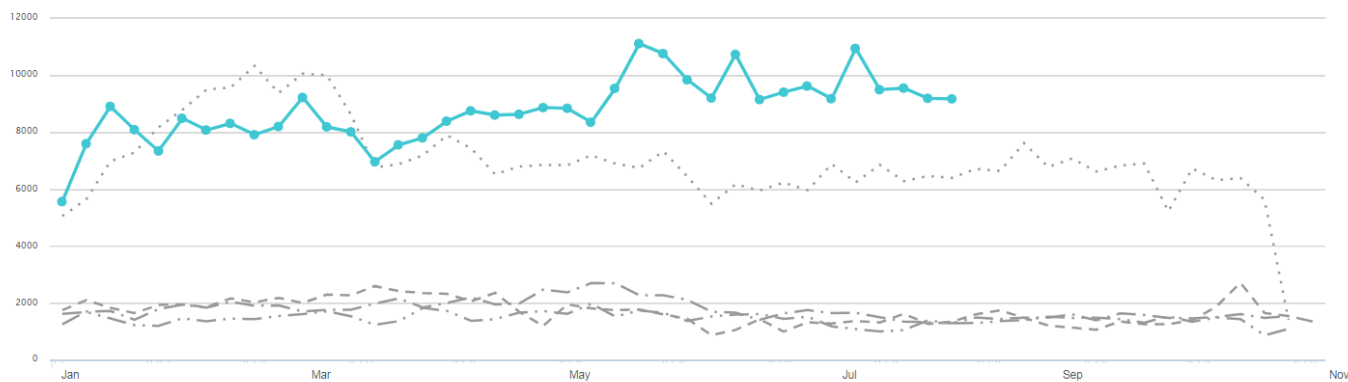
Graph legend

————	2019
—··—··—	2018
—·—·—·	2017
— — — —	2016
···········	2015

Key AWD indicators (2019)

| 333,435	1,910	554
Cases	Deaths	Alerts

Figure 5b | % morbidity



Figure 5c | Age breakdown

AWD is one of the top causes of morbidity in the country with 333,435 cases reported since week 1 of 2019 including 1,910 deaths. AWD trend for week 38 of 2019, is on decline but above 2015, 2016, 2017 and 2018 as shown in figure 5a, above.

Acute Watery Diarrhoea| Maps and Alert Management

Map 4 | Map of AWD cases by county (2019)

a. 2014   b. 2015   c. 2016

d. 2017   d. 2018   e. 2019
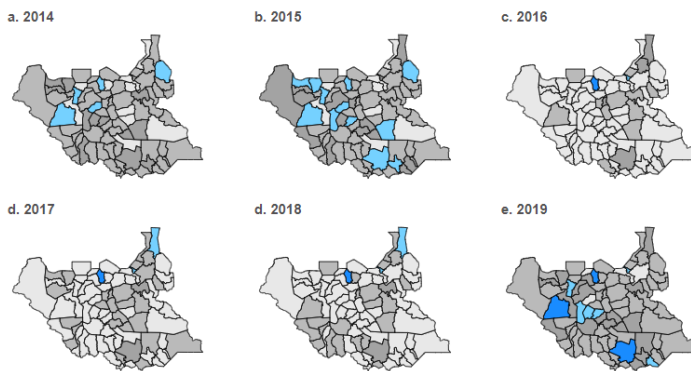
Map 5 | Map of AWD alerts by county (2019)
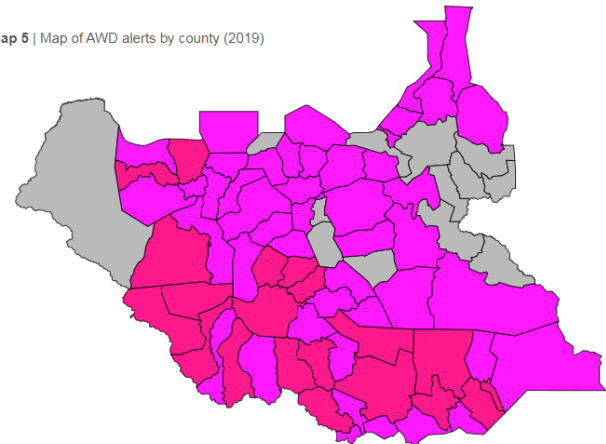
Map legend

Number of AWD cases

0   1   5,000   10,000   20,000

Number of AWD alerts

0   1   10

Alert threshold

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

554	395
Alerts	Verified

Risk Assessment

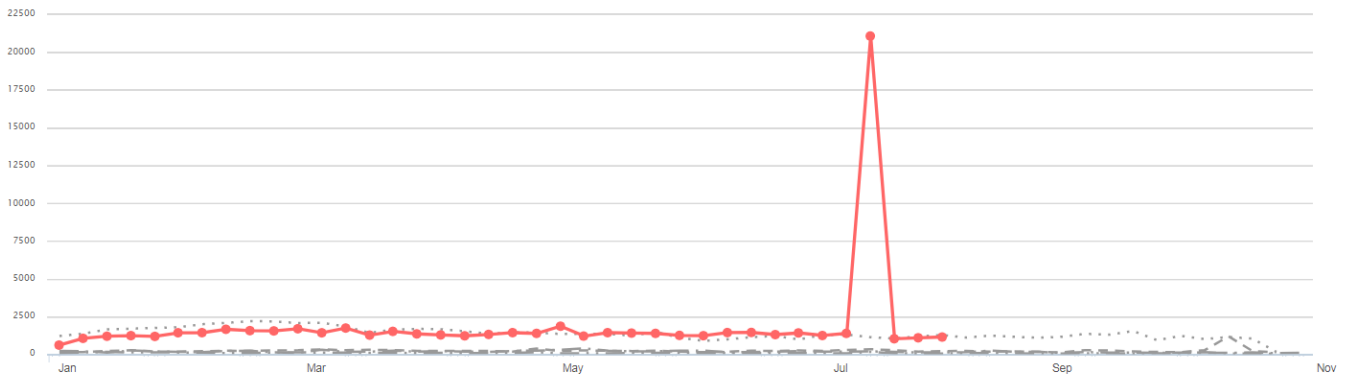| 1	2	3	0
Low Risk	Moderate Risk	High Risk	Very High Risk

The number of AWD alerts triggered since week 1 of 2019 is 554 out of which 395 were verified. Maps above highlight the areas reporting AWD alerts from 2015 to 2019 .

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Figure 6a | Trend in bloody diarrhoea cases over time (South Sudan)

Graph legend

———	2019
—··—··—	2018
—·—·—·—	2017
— — — —	2016
··········	2015

Key bloody diarrhoea indicators (2019)

| 70,817	347	517
Cases	Deaths	Alerts

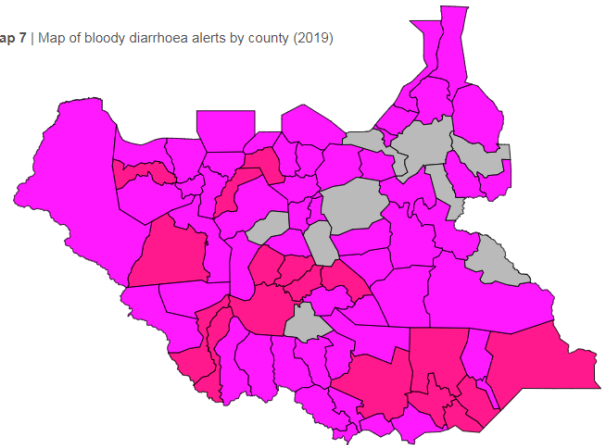**Figure 6b** | % morbidity

Figure 6c | Age breakdown

Since week 1 of 2019, a total of 70,817 cases of ABD have been reported country wide including 347 deaths. ABD trend for week 38 of 2019 remain constant and is below 2015,2016, and 2017. Refer to figure 6a, above.

Acute Bloody Diarrhoea| Maps and Alert Management

Map 6 | Map of bloody diarrhoea cases by county (2019)

a. 2014   b. 2015   c. 2016

d. 2017   d. 2018   e. 2019
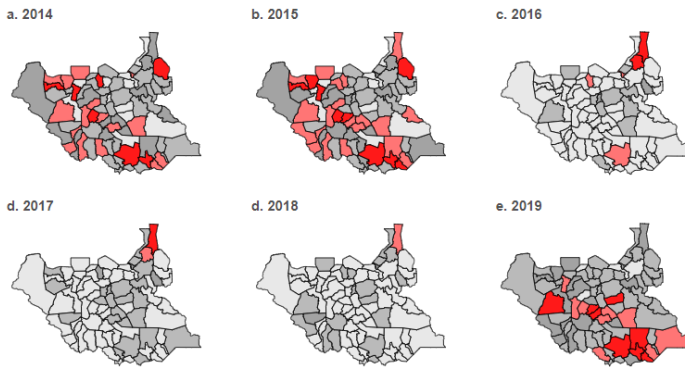
Map 7 | Map of bloody diarrhoea alerts by county (2019)

Map legend

Number of bloody diarrhoea cases
0   500   1,000   2,000

Number of alerts
0   10

Alert threshold
Twice the average number of cases over the past 3 weeks. *Source: IDSR*

517	334
Alerts	Verified

Risk Assessment

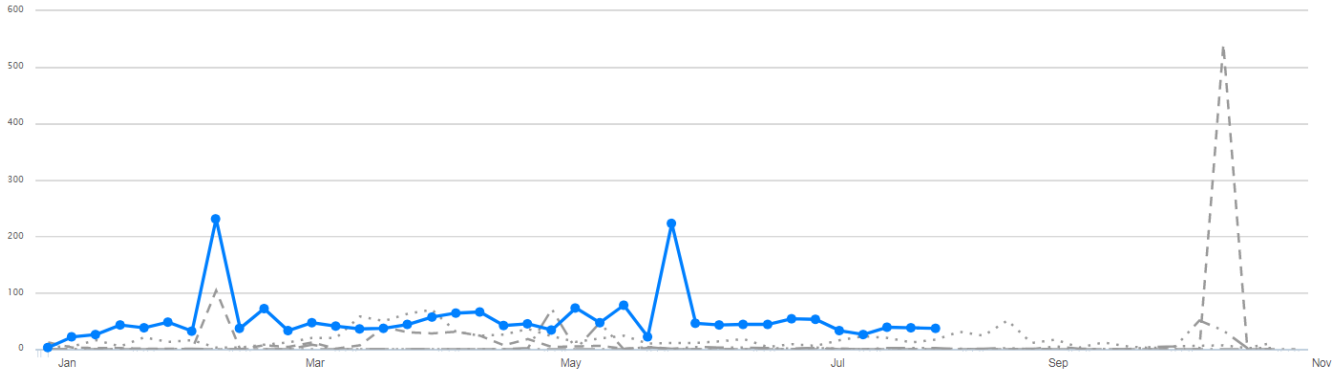| 1	7	1	0
Low Risk	Moderate Risk	High Risk	Very High Risk

Total of 517 alerts were generated since week 1 of 2019, of which 334 were verified by the county surveillance team. Maps indicating areas triggering alerts since 2015 to 2019 are shown above.

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Figure 7a | Trend in number of cases over time (South Sudan)

Graph legend

——	2019
— ·· — ·· —	2018
— · — · —	2017
— — — —	2016
··········	2015

Key measles indicators (2019)

| **1,998**	**103**	**496**
Cases	Deaths	Alerts

**Figure 7b | % morbidity**

Figure 7c | Age breakdown

Since the beginning of 2019, at least 1,998 suspect measles cases including 103 deaths. Have been reported through the EWARS website. Measles trend for week 38 of 2019 is constant and is in contact with 2015 trend as shown in the graph above

Map 7 | Map of measles cases by county (2019)

a. 2014   b. 2015   c. 2016

d. 2017   d. 2018   e. 2019
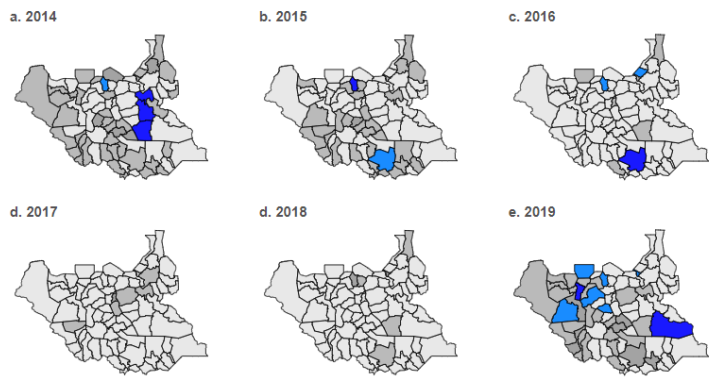
Map 8 | Map of measles alerts by county (2019)
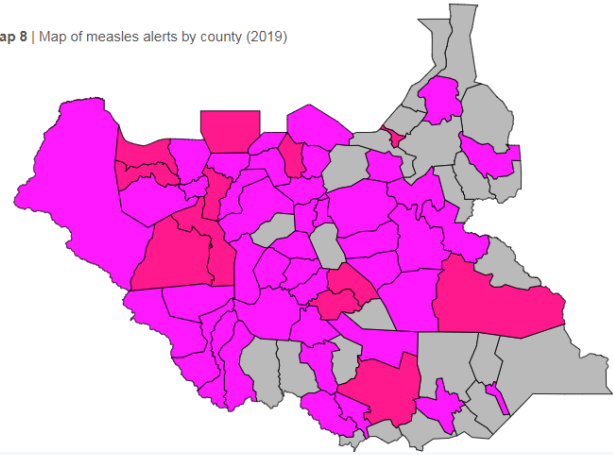
Map legend

Number of measles cases

Number of measles alerts

Alert threshold

1 case.
Source: IDSR

496	**366**
Alerts	Verified

Risk Assessment

10	**12**	**21**	**7**
Low Risk	Moderate Risk	High Risk	Very High Risk

Since week 1 of 2019, 496 alerts of measles were triggered and 366 of those have been verified at county level. Maps of areas raising alerts from 2015 to 2019 are shown above.

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This bulletin is produced by the Ministry of Health with Technical support from WHO

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Notes

The data has 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