South Sudan

Integrated Disease Surveillance and Response (IDSR)

Annexes W13 2019 (March 25 – March 31)

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 (W13 2019)

Number of consultations

0   1   1,000   2,500   5,000
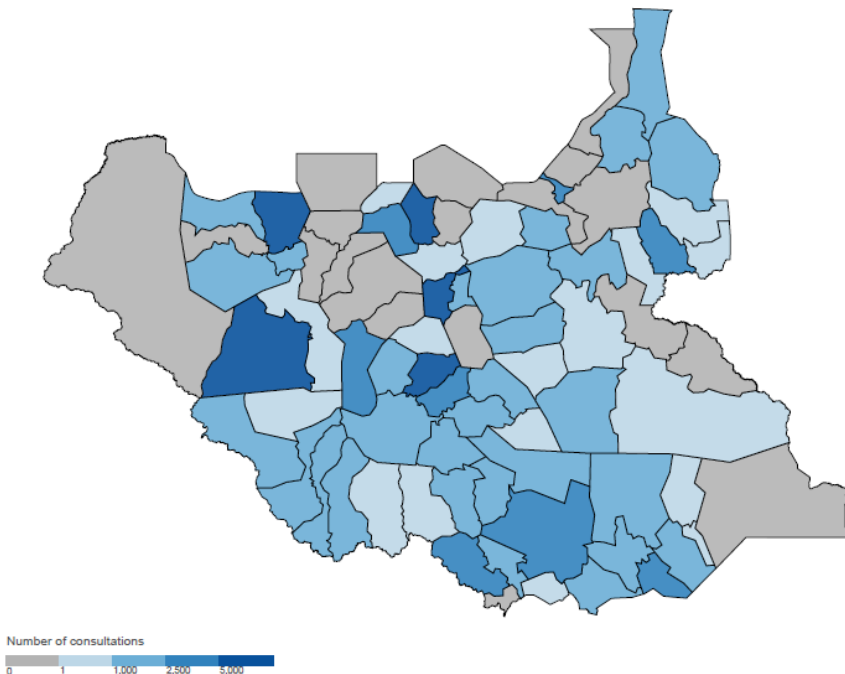
Hub	W13	2019
Aweil	9,924	156,027
Bentiu	21,394	208,124
Bor	9,401	117,390
Juba	8,150	229,823
Kwajok	3,070	141,849
Malakal	12,900	223,496
Rumbek	16,628	392,397
Torit	9,399	129,902
Wau	7,911	143,814
Yambio	12,927	163,041
South Sudan	**111,704**	**1,905,863**

The total consultation in the country since week 1 of 2019 is 1,905,863 by hub,Bentiu 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)
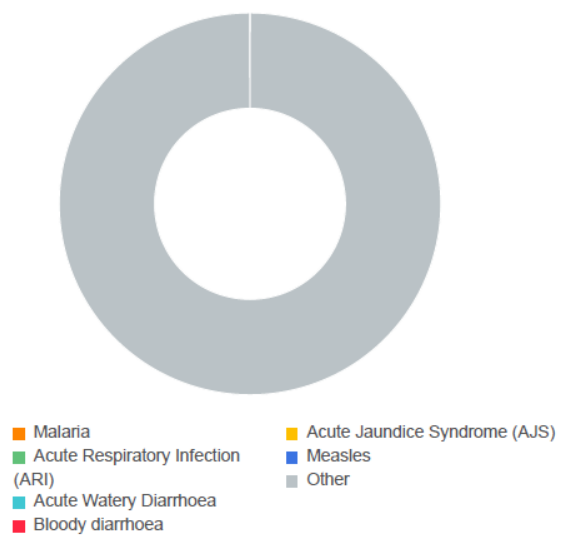
Syndrome	W13		2019	
	# deaths	% mortality	# deaths	% mortality
Malaria	9	18.8%	702	0.0%
ARI	8	16.7%	138	0.0%
AWD	10	20.8%	254	0.0%
Bloody diarrhoea	3	6.3%	121	0.0%
AJS	0	0.0%	56	0.0%
Measles	0	0.0%	46	0.0%
Other	18	37.5%	9,334,182	100.0%
Total deaths	**48**	**100%**	**9,335,499**	**100%**

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

Figure 1, above shows the proportional mortality for 2019, with AWD being the main cause of mortality accounting for 20.8% of the deaths since week 1 of 2019, followed by malaria and ARI
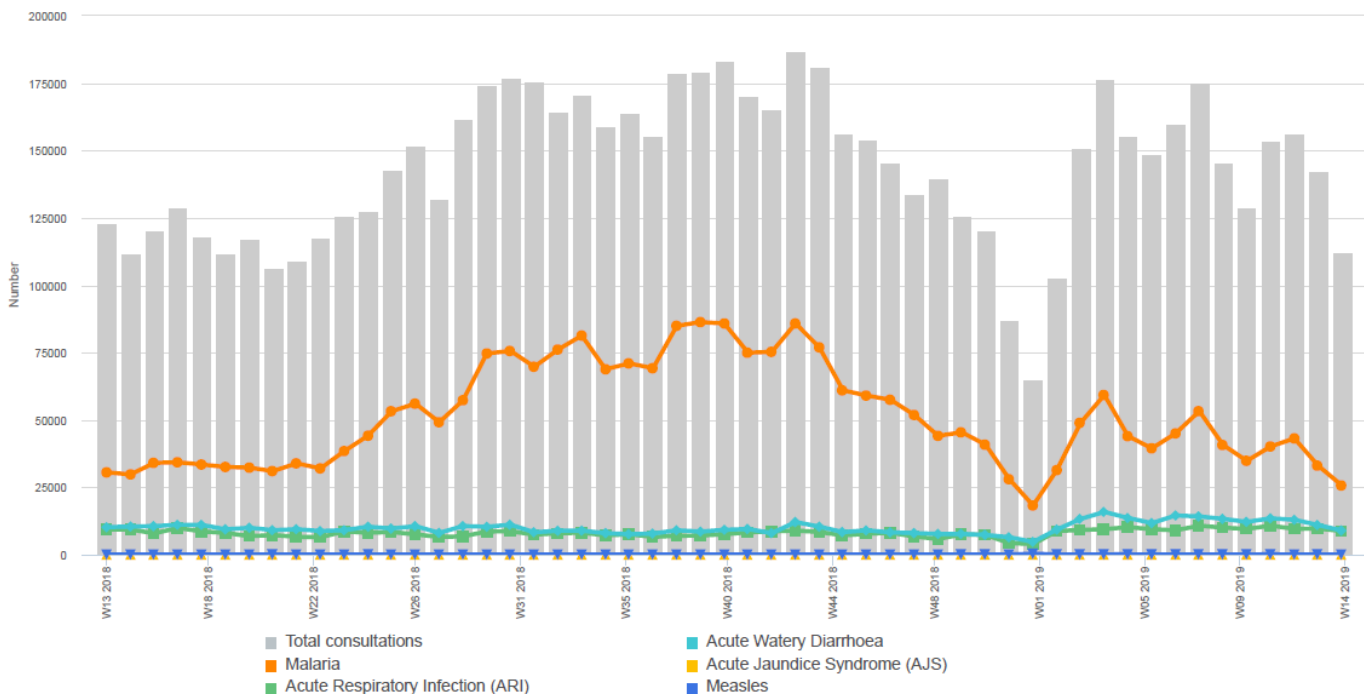
Proportional morbidity

Figure 2 | Proportional morbidity (2019)
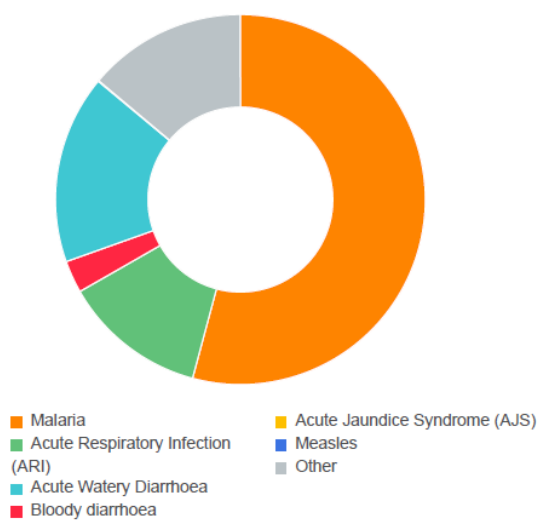
Syndrome	W13		2019	
	# cases	% morbidity	# cases	% morbidity
Malaria	25,630	45.8%	538,279	54.2%
ARI	8,731	15.6%	124,720	12.6%
AWD	8,917	15.9%	163,838	16.5%
Bloody diarrhoea	1,875	3.4%	28,148	2.8%
AJS	5	0.0%	118	0.0%
Measles	17	0.0%	511	0.1%
Other	10,764	19.2%	137,898	13.9%
Total cases	**55,939**	**100%**	**993,512**	**100%**

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

Figure 2, indicates the top causes of morbidity in the country, with malaria being the leading cause of morbidity 25,630 (45.8%) followed by AWD, ARIand 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 (W13)

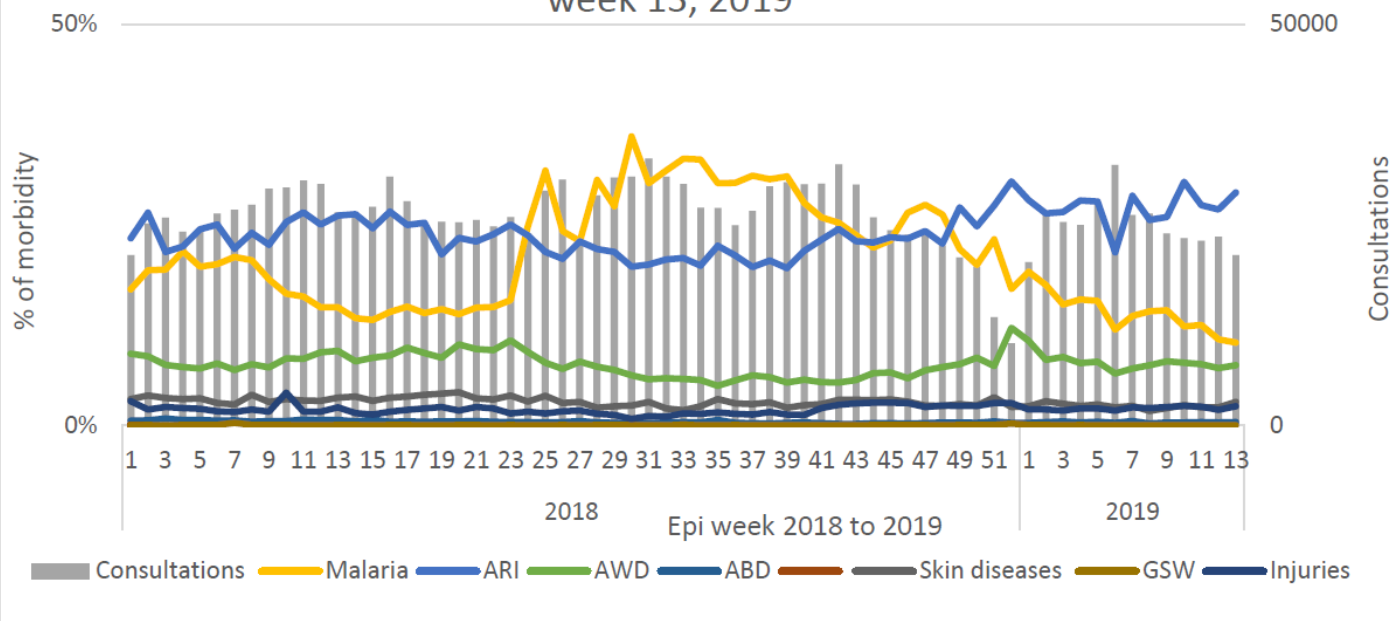## IDSR Proportionate morbidity trends - in relatively stable states

Fig. 1 | IDSR Proportionate morbidity trends, week 1, 2018 to 13, 2019
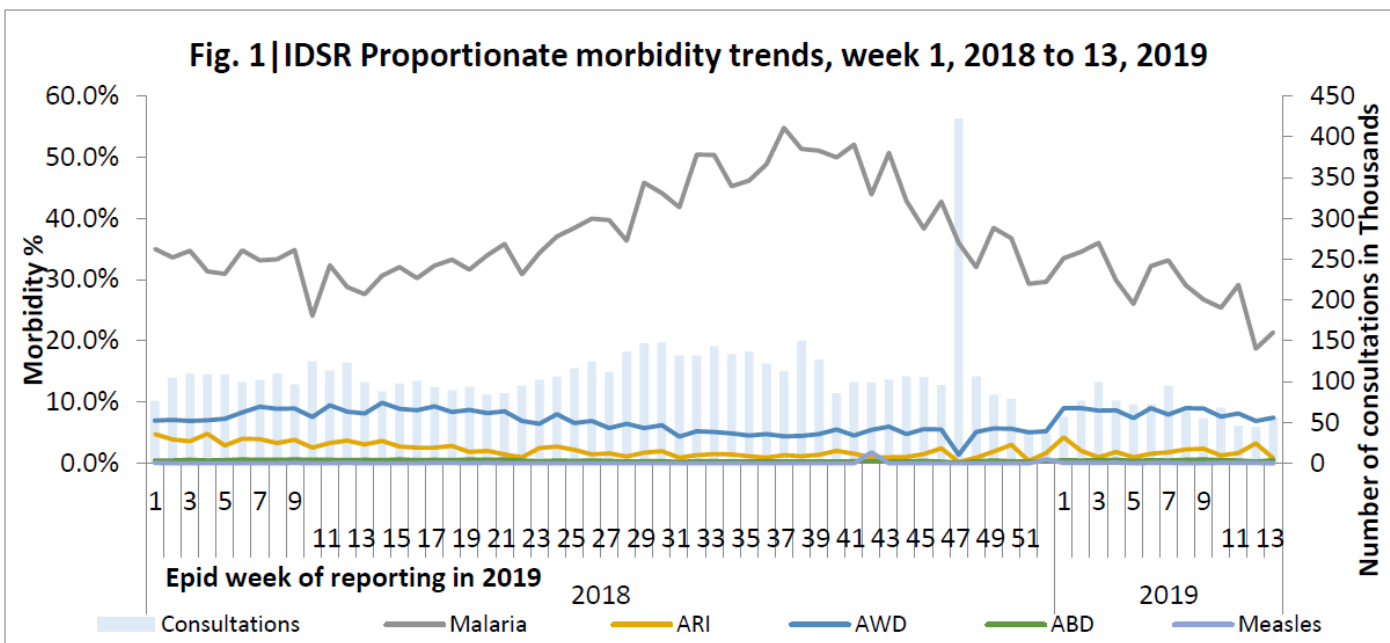
In the relatively stable states, malaria is the top cause of morbidity accounting for 21.4% of the consultations in week 13 (representing an increase from 18.7% in week 12).

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IDP Proportionate morbidity trends - in displaced population
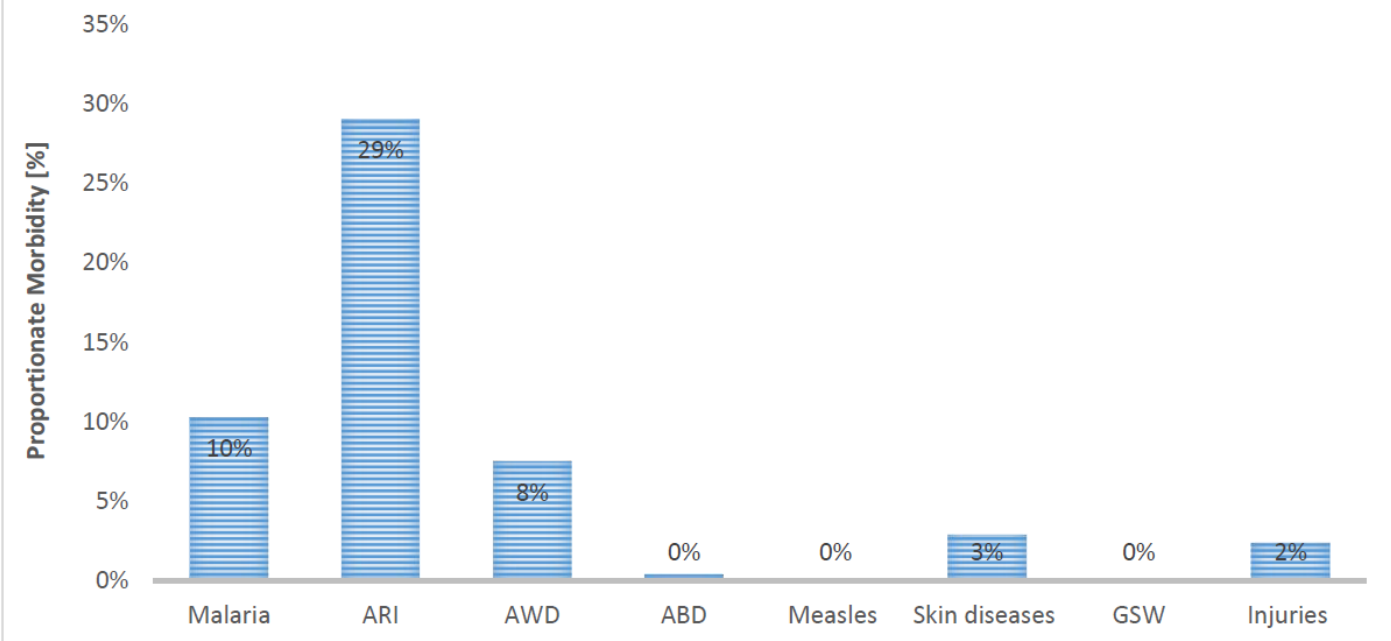

Fig.2| IDP Proportionate morbidity trends, week 01, 2018 to week 13, 2019

Among the IDPs, ARI and Malaria accounted for 29% and 10 of the consultations in week 13. The other significant causes of morbidity in the IDPs includes AWD, Skin diseases, and Measles.
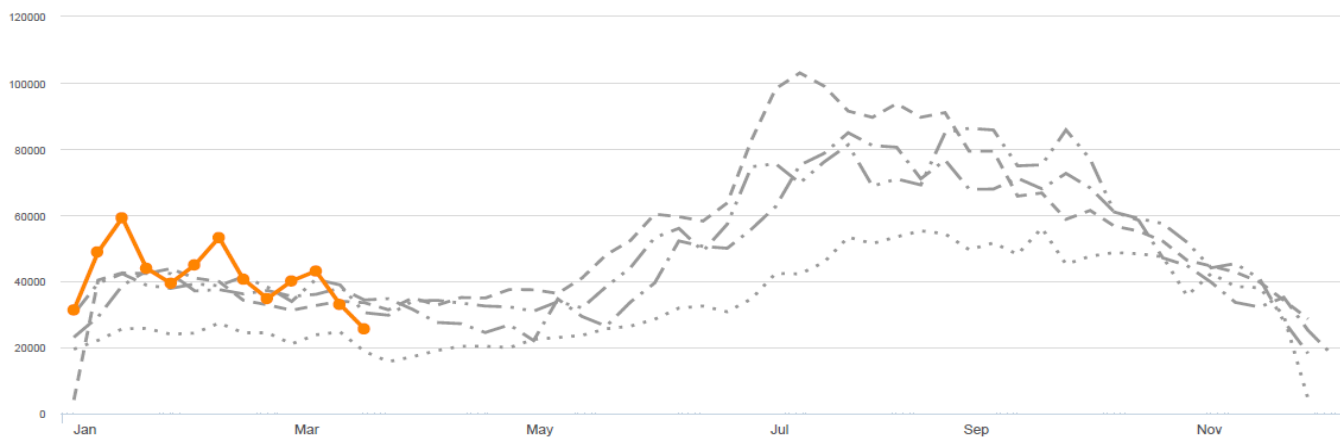
IDP Proportionate morbidity trends - in displaced population

CAUSES OF MORBIDITY AMONG THE IDPS WEEKS 13, 2019

The top causes of morbidity in the IDPs in 2019 include, ARI, Malaria, AWD, Skin diseases, and injuries.

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Malaria | Trends over time

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

| Graph legend | Key malaria indicators (2019) | | | Figure 4b | % morbidity | Figure 4c | Age breakdown |
|---|---|---|---|---|---|
| 2019 | **538,279** | **702** | **63** | | |
| 2018 | Cases | Deaths | Alerts | | |
| 2017 | | | | | |
| 2016 | | | | | |
| 2015 | | | | | |

Malaria is the top course of Morbidity in the country, a total of 538,279 cases with 702 deaths registered since week 1 of 2019. malaria trend for week 13 of 2019 is below 2017,2016 and 2018,2017,and 2016 as shown in the figure 4a, above.

Malaria | Maps and Alert Management
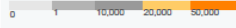
Map 2 | Map of malaria cases by county

a. 2014   b. 2015   c. 2016

d. 2017   d. 2018   e. 2019
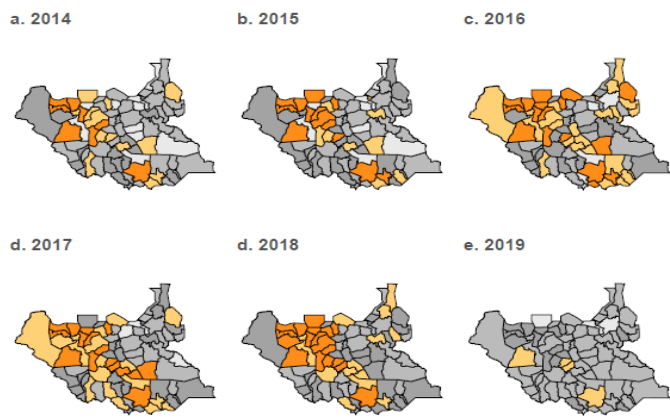
Map 3 | Map of malaria alerts by county (2019)
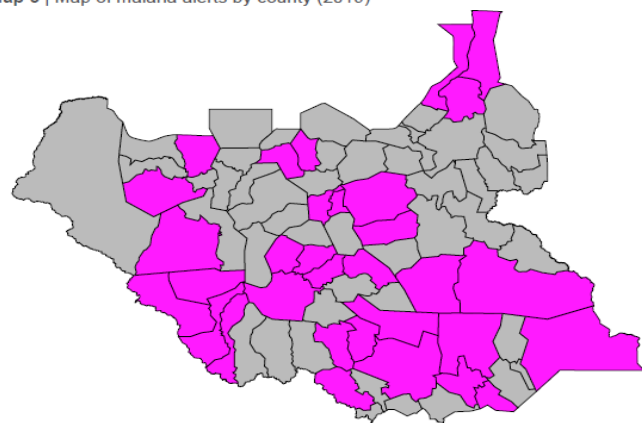
Map legend

Number of malaria cases

0   1   10,000   20,000   50,000

Number of malaria alerts

0   1   10

Alert threshold

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

63	**51**
Alerts	Verified

Risk Assessment

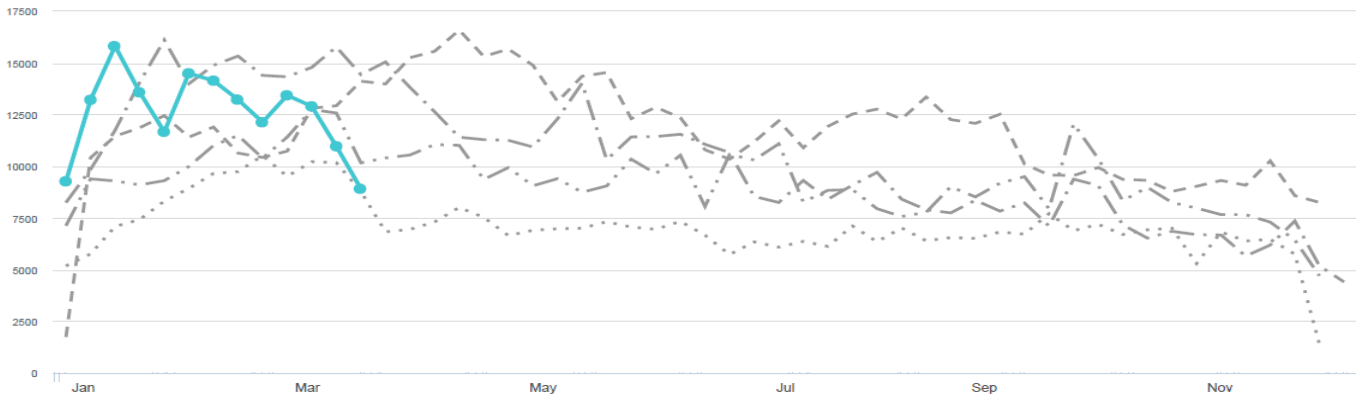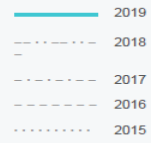| **1**	**0**	**0**	**0**
Low Risk	Moderate Risk	High Risk	Very High Risk

Since the beginning of the year, a total of 63 malaria alerts have been triggered, 51 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
— · — · — ·	2017
— — — —	2016
· · · · · · · · ·	2015

Key AWD indicators (2019)

163,838 Cases

254 Deaths

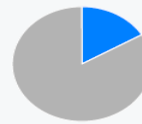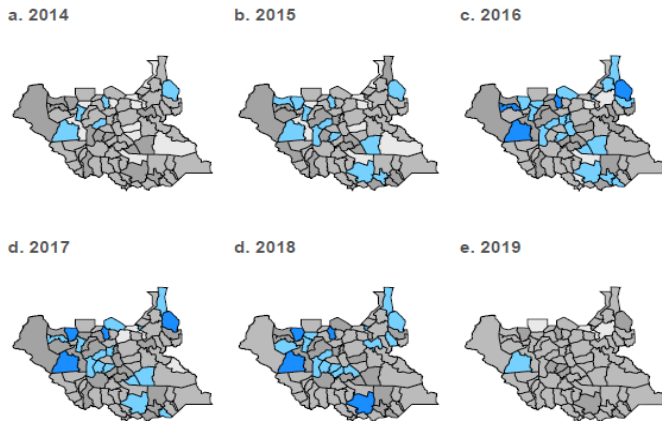**94** Alerts

Figure 5b | % morbidity


Figure 5c | Age breakdown

AWD is one of the top causes of morbidity in the country with 163, 838 cases reported since week 1 of 2019 including 254 deaths. AWD trend for week 13 of 2019,is below 2015, 2016,2017,and 2018 as shown in figure 5a, above.
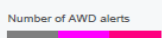
Acute Watery Diarrhoea| Maps and Alert Management

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)
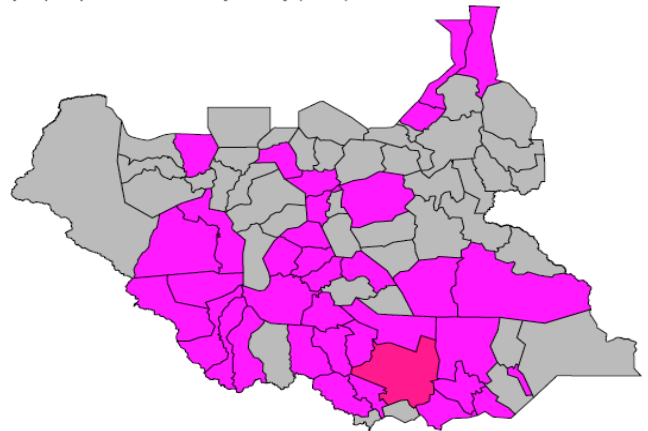
Map legend

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*

94 Alerts

73 Verified

Risk Assessment

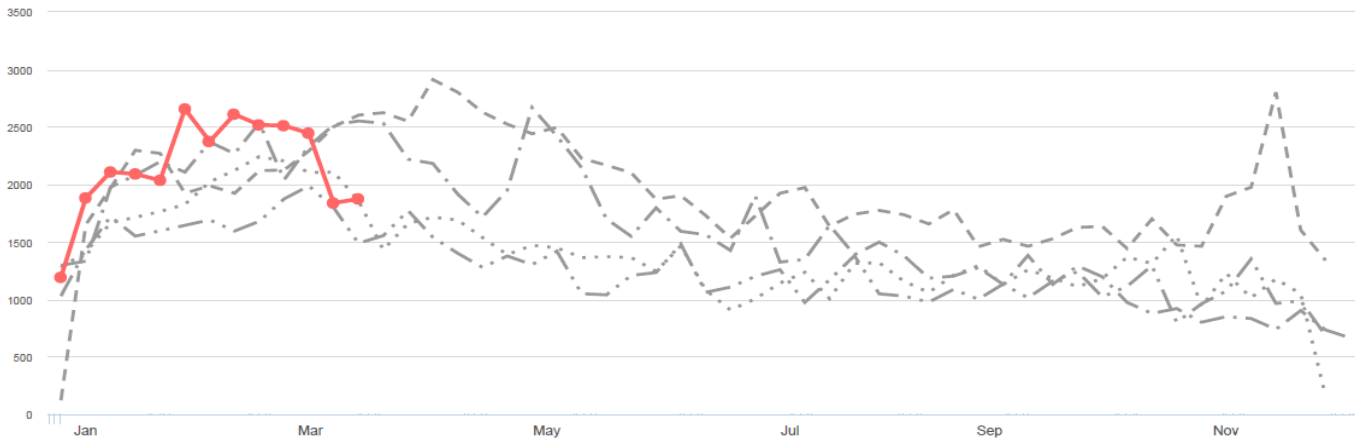| **0** Low Risk	**1** Moderate Risk	**1** High Risk	**0** Very High Risk

The number of AWD alerts triggered since week 1 of 2019 is 94, out of which 73 were verified. Maps above highlight the areas reporting AWD alerts from 2015 to 2019 .

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Acute Bloody Diarrhoea | Trends over time

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

Graph legend

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

Key bloody diarrhoea indicators (2019)

| 28,148	121	119
Cases	Deaths	Alerts

Figure 6b | % morbidity



Figure 6c | Age breakdown

Since week 1 of 2019, a total of 28,148 cases of ABD have been reported country wide including 121 deaths. ABD trend for 2019 is on increase is above 2015and 2016. Refer to figure 6a, above.

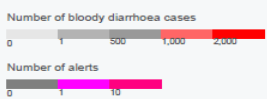# Acute Bloody Diarrhoea | Maps and Alert Management

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

a. 2014   b. 2015   c. 2016

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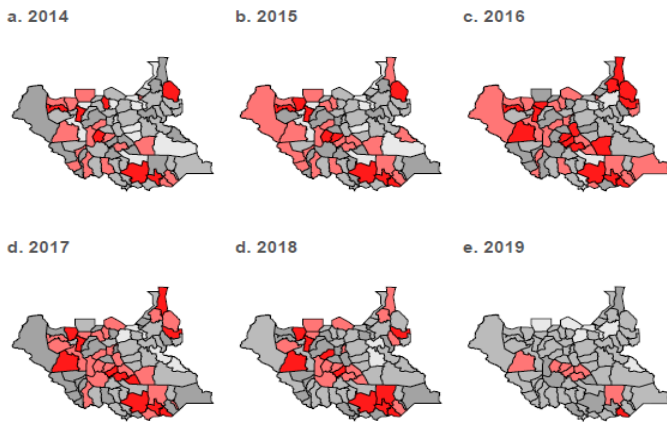
Map 7 | Map of bloody diarrhoea alerts by county (2019)
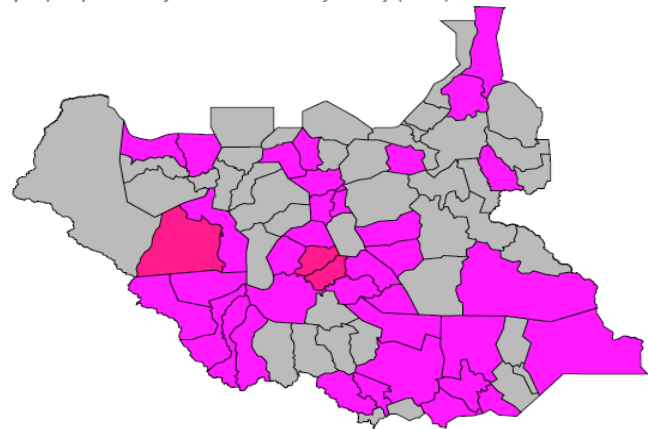
Map legend

Number of bloody diarrhoea cases

| 0 | 1 | 500 | 1,000 | 2,000 |

Number of alerts

| 0 | 1 | 10 |

Alert threshold

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

119	97
Alerts	Verified

Risk Assessment

0	4	1	0
Low Risk	Moderate Risk	High Risk	Very High Risk

Total of 119 alerts were generated since week 1 of 2019, of which 97 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)

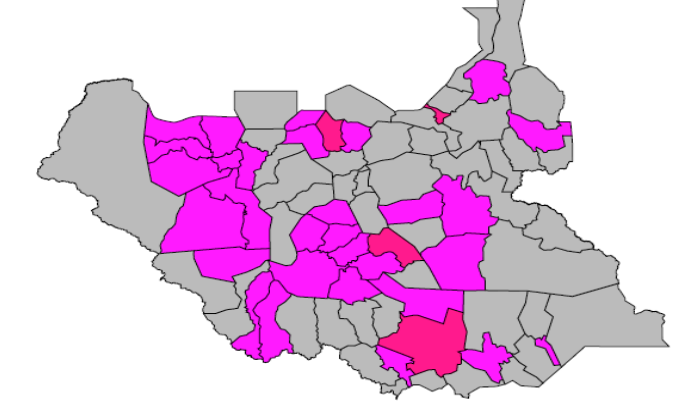| Graph legend | | Key measles indicators (2019) | | | Figure 7b | % morbidity | Figure 7c | Age breakdown |
|---|---|---|---|---|---|---|
| ———— | 2019 | **511**
Cases | **46**
Deaths | **148**
Alerts | | |
| —·—·— | 2018 | | | | | |
| —·—·— | 2017 | | | | | |
| ------ | 2016 | | | | | |
| ·········· | 2015 | | | | | |

Since the beginning of 2019, at least 511 suspect measles cases including 46 death (CFR 0.74%) have been reported. . Of these, ----- suspect cases have undergone measles case-based laboratory-backed investigation with ----- samples collected out of which ---- measles IgM positive cases; ----- clinically confirmed cases; and ----- cases confirmed by epidemiological linkage.

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

a. 2014   b. 2015   c. 2016

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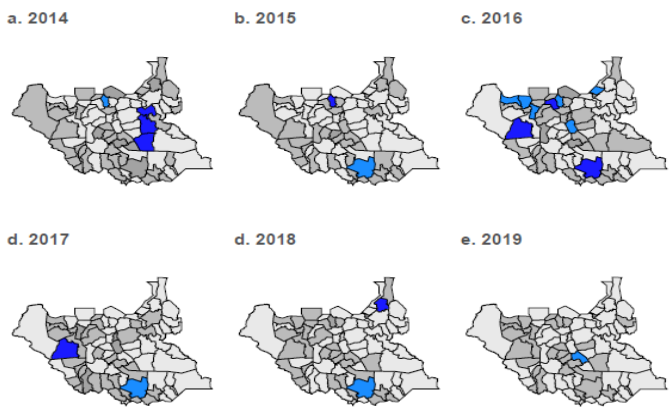
Map 8 | Map of measles alerts by county (2019)

Map legend

Number of measles cases

0   1   50   100   250

Number of measles alerts

0   1   10

Alert threshold

1 case.
Source: IDSR

148 Alerts	**116** Verified

Risk Assessment

6 Low Risk	**10** Moderate Risk	**5** High Risk	**0** Very High Risk

Since week 1 of 2019, 148 alerts of measles were triggered and 116 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