

South Sudan

Integrated Disease Surveillance and
Response (IDSR)

Annexes W39 2018 (Sep 24 – Sep 30)



**World Health
Organization**
South Sudan



Ministry of Health
Republic of South Sudan

Access and Utilisation

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Slide 12 **Trend in measles cases over time**

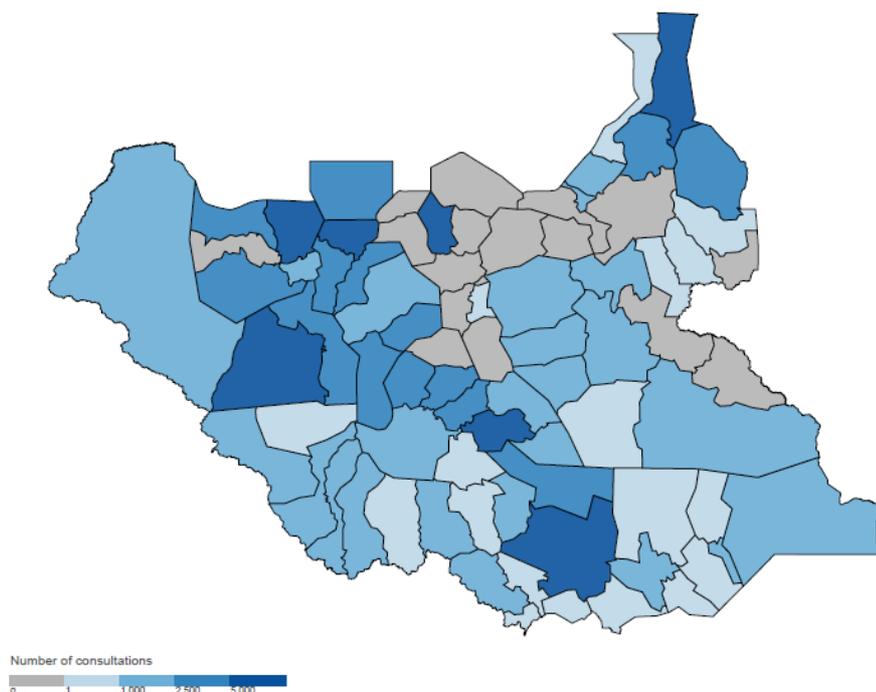
Slide 13 **Measles maps and alert management**

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 (W39 2018)

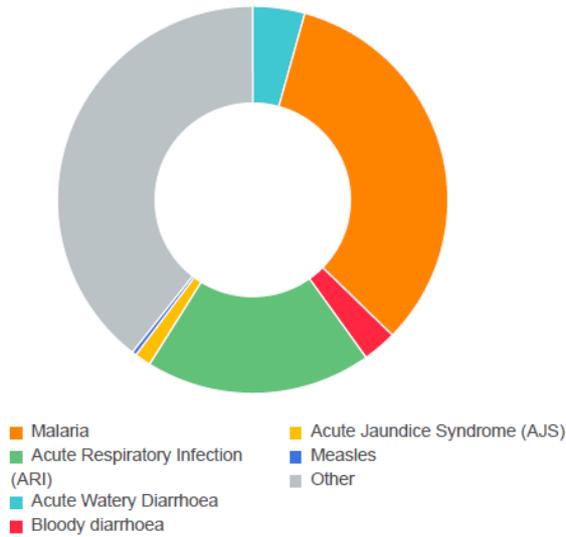


Hub	W39	2018
Aweil	21,276	530,326
Bentiu	6,999	624,641
Bor	8,751	425,847
Juba	17,061	481,211
Kwajok	26,802	1,034,157
Malakal	19,416	566,895
Rumbek	23,176	718,604
Torit	6,701	251,197
Wau	16,150	380,642
Yambio	9,469	452,600
South Sudan	155,801	5,466,120

The total consultation in the country since week 1 of 2018 is 5,466,120 by hub, Kwajok 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.

Proportional mortality

Figure 1 | Proportional mortality (2018)

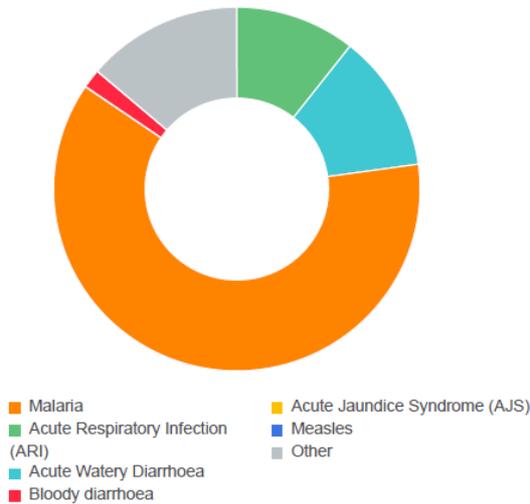


Syndrome	W39		2018	
	# deaths	% mortality	# deaths	% mortality
Malaria	9	100.0%	268	33.0%
ARI	0	0.0%	152	18.7%
AWD	0	0.0%	35	4.3%
Bloody diarrhoea	0	0.0%	23	2.8%
AJS	0	0.0%	11	1.4%
Measles	0	0.0%	3	0.4%
Other	0	0.0%	320	39.4%
Total deaths	9	100%	812	100%

Figure 1, above shows the proportional mortality for 2018, with malaria being the main cause of mortality accounting for 33.9% of the deaths since week 1 of 2018, followed by bloody diarrhoea, and acute watery diarrhoea.

Proportional morbidity

Figure 2 | Proportional morbidity (2018)

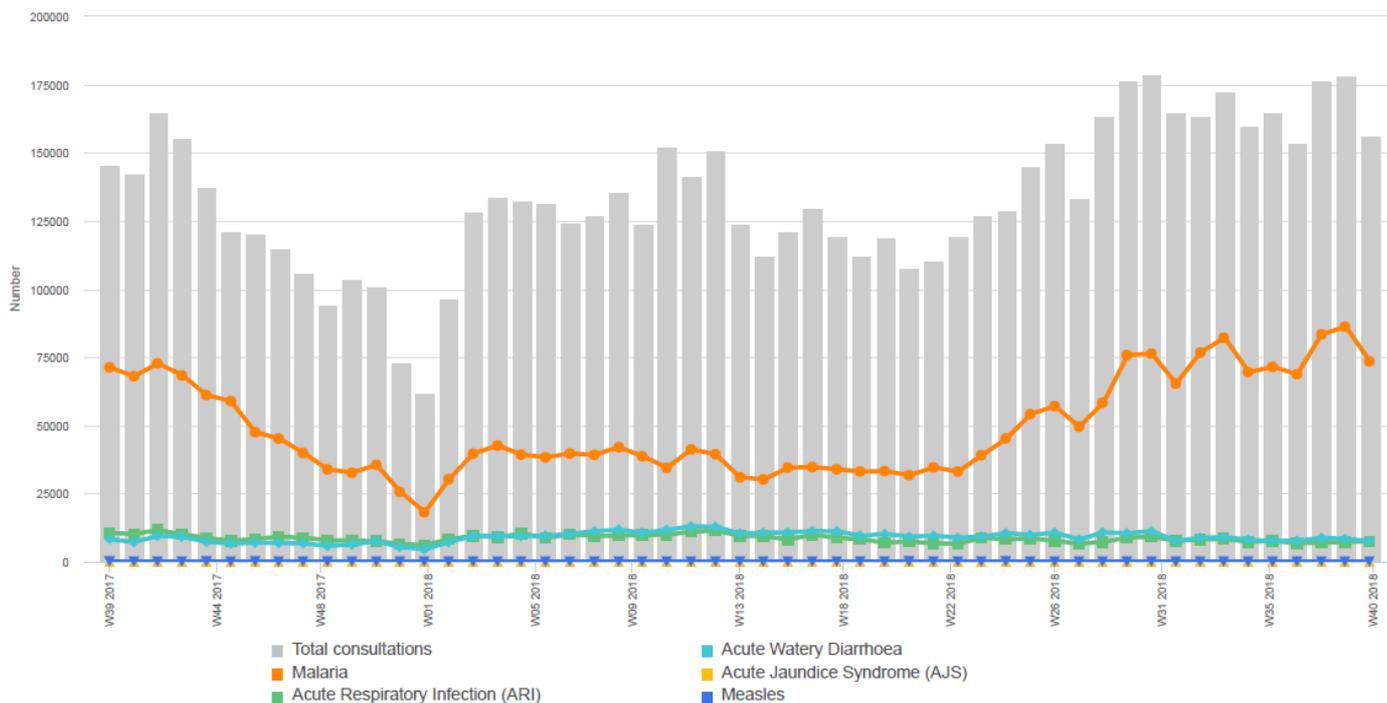


Syndrome	W39		2018	
	# cases	% morbidity	# cases	% morbidity
Malaria	73,444	73.1%	1,929,649	61.7%
ARI	7,430	7.4%	332,098	10.6%
AWD	7,515	7.5%	381,536	12.2%
Bloody diarrhoea	879	0.9%	52,785	1.7%
AJS	2	0.0%	203	0.0%
Measles	6	0.0%	419	0.0%
Other	11,135	11.1%	430,321	13.8%
Total cases	100,411	100%	3,127,011	100%

Figure 2, indicates the top causes of morbidity in the country, with malaria being the leading cause of morbidity 1,929,649 (61.7%) followed by ARI, AWD and ABD respectively since week 1 of 2018. refer to the figure above for more information.

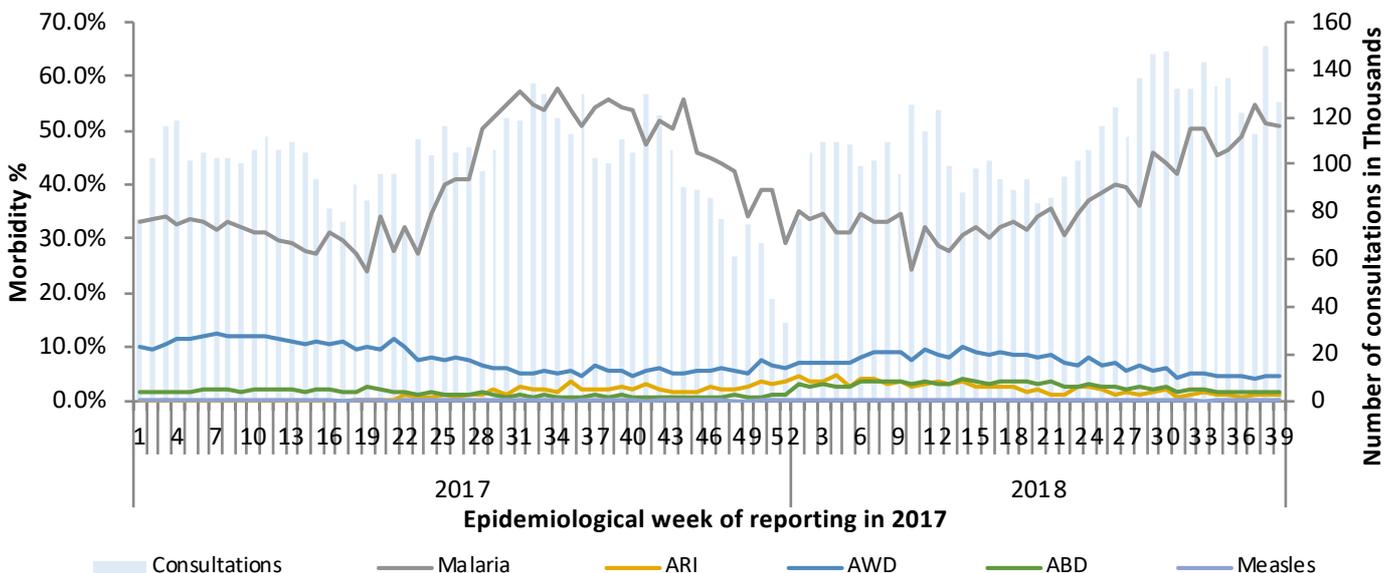
Trend in consultations and key diseases

Figure 3 | Trend in total consultations and key diseases (W39)



IDSR Proportionate morbidity trends - in relatively stable states

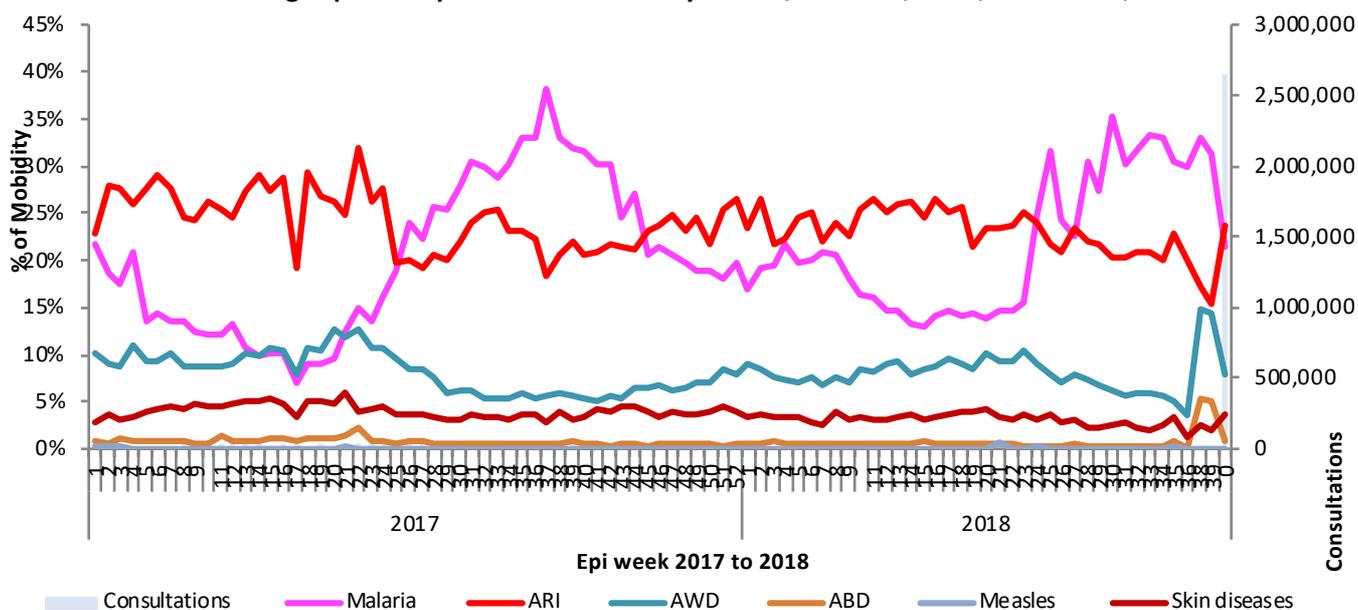
Fig. 1 | IDSR Proportionate morbidity trends, week 1, 2017 to 39, 2018



In the relatively stable states, malaria is the top cause of morbidity accounting for 73.1% of the consultations in week 39 (representing a decline from 74.7% in week 38).

IDP Proportionate morbidity trends - in displaced population

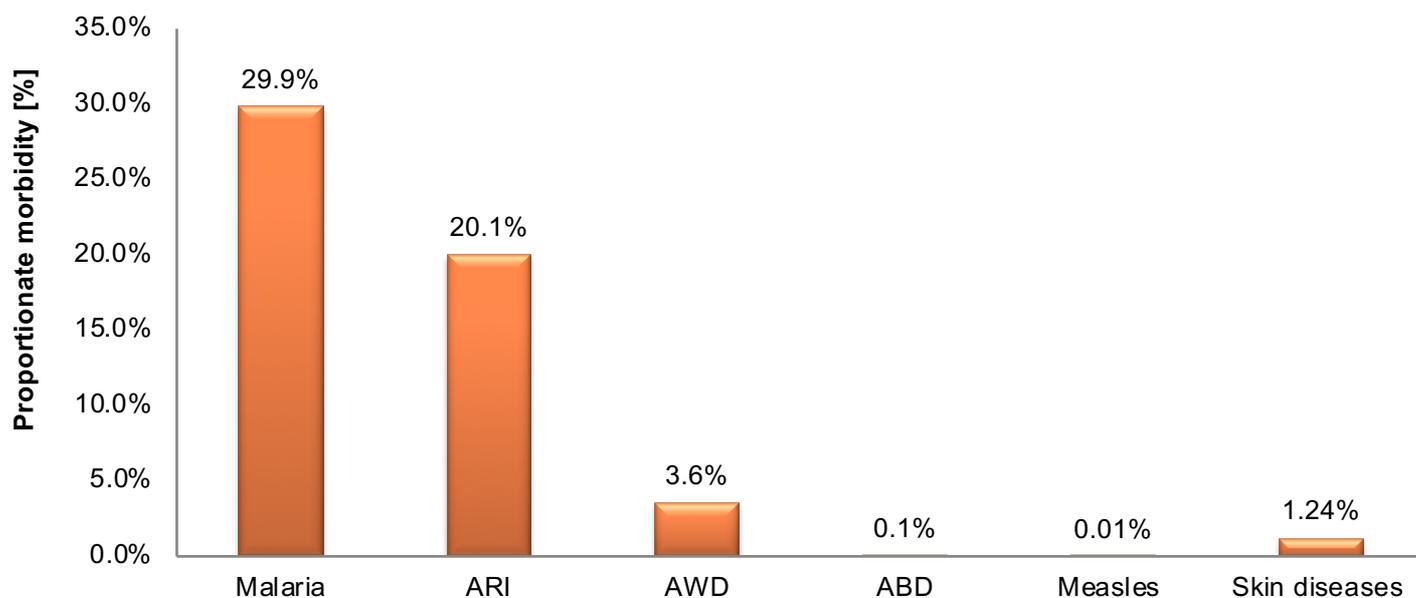
Fig. 2 | IDP Proportionate morbidity trends, week 01, 2017, to week 39, 2018



Among the IDPs, Malaria and ARI accounted for 29.9% and 20.1% of the consultations in week 39. The other significant causes of morbidity in the IDPs include AWD, Skin diseases, and Measles.

IDSR Proportionate morbidity trends - in displaced population

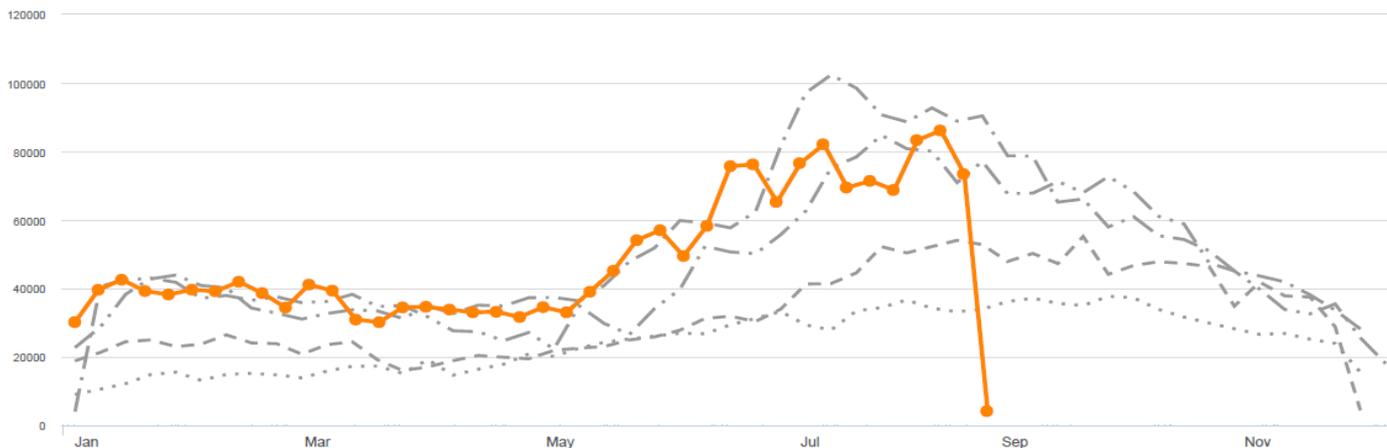
Causes of morbidity among the IDPs weeks 39, 2018



The top causes of morbidity in the IDPs in 2018 include ARI, Malaria, AWD, Skin diseases, and ABD.

Malaria | Trends over time

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



Graph legend

- 2018
- - - 2017
- · · 2016
- - - 2015
- · · 2014

Key malaria indicators (2018)

1,929,649 268

Cases

Deaths

111

Alerts

Figure 4b | % morbidity



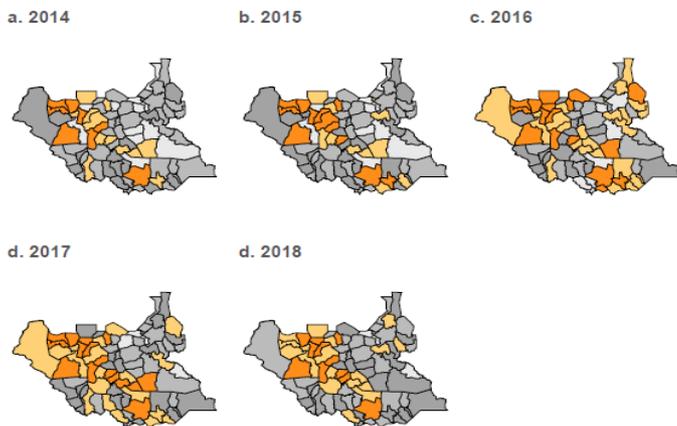
Figure 4c | Age breakdown



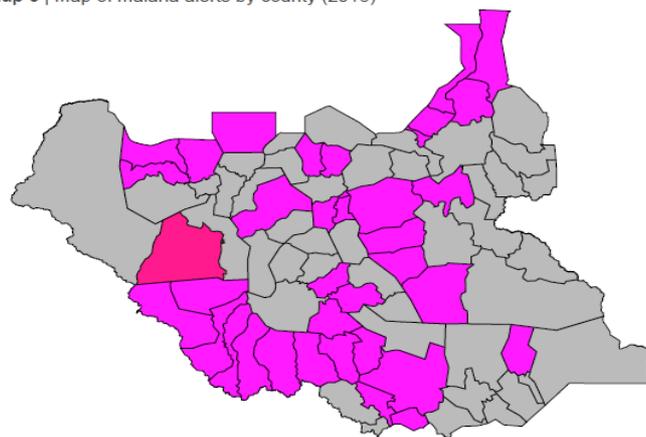
Malaria is the top course of Morbidity in the country, a total of 1,929,649 cases with 268 deaths registered since week 1 of 2018. malaria trend for week 39 of 2018 is below 2014,2015,2016 and 2017 as shown in the figure 4a, above.

Malaria | Maps and Alert Management

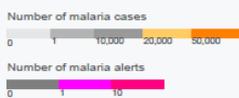
Map 2 | Map of malaria cases by county (2018)



Map 3 | Map of malaria alerts by county (2018)



Map legend



111

Alerts

74

Verified

Risk Assessment



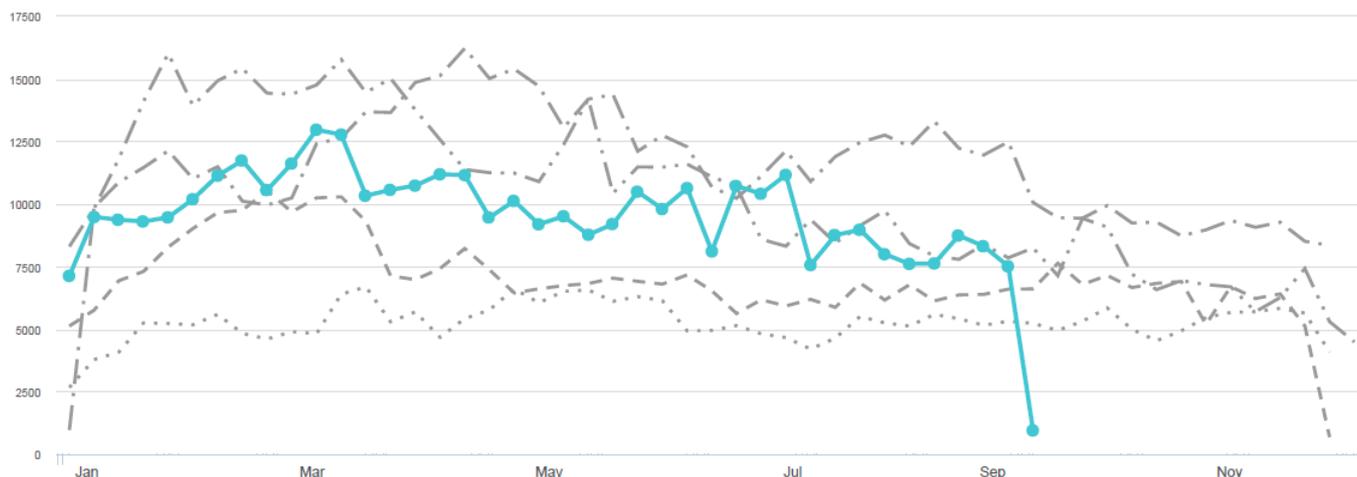
Alert threshold

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

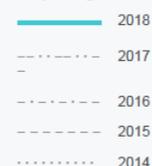
Since the beginning of the year, a total of 111 malaria alerts have been triggered, 74 of those were verified. The Maps above indicate the location reporting malaria alerts from 2014, 2015, 2016, 2017, and 2018.

Acute Watery Diarrhoea | Trends over time

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



Graph legend



Key AWD indicators (2018)

381,536 Cases **35** Deaths **116** Alerts

Figure 5b | % morbidity

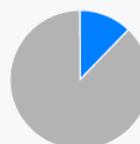


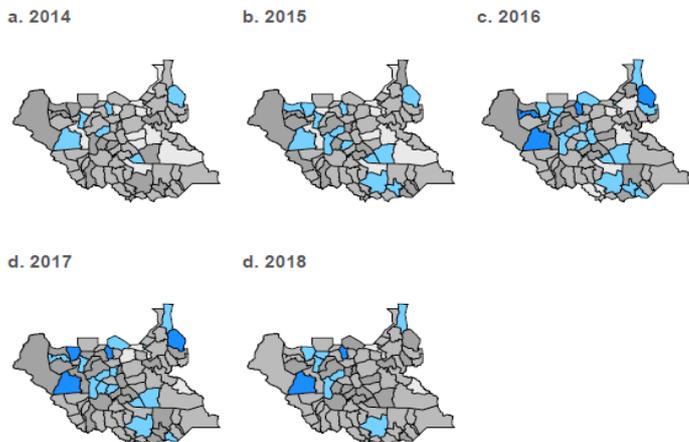
Figure 5c | Age breakdown



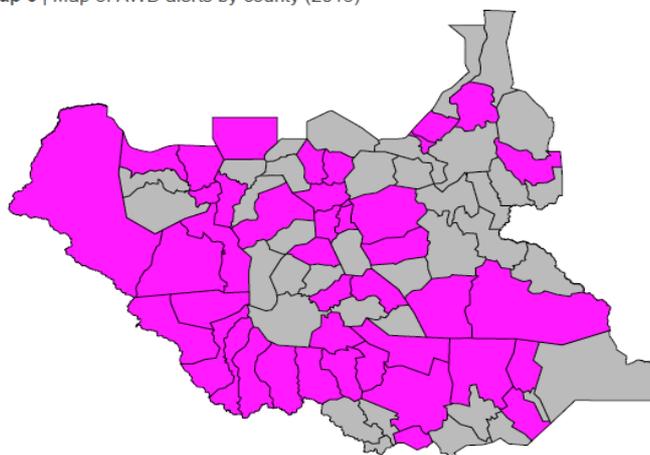
AWD is one of the top causes of morbidity in the country with 381,536 cases reported since week 1 of 2018 including 35 deaths. AWD trend for week 39 of 2018, is below 2016 and 2017, as shown in figure 5a, above.

Acute Watery Diarrhoea | Maps and Alert Management

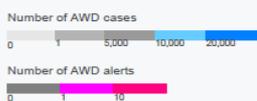
Map 4 | Map of AWD cases by county (2018)



Map 5 | Map of AWD alerts by county (2018)



Map legend



116 Alerts **80** Verified

Risk Assessment

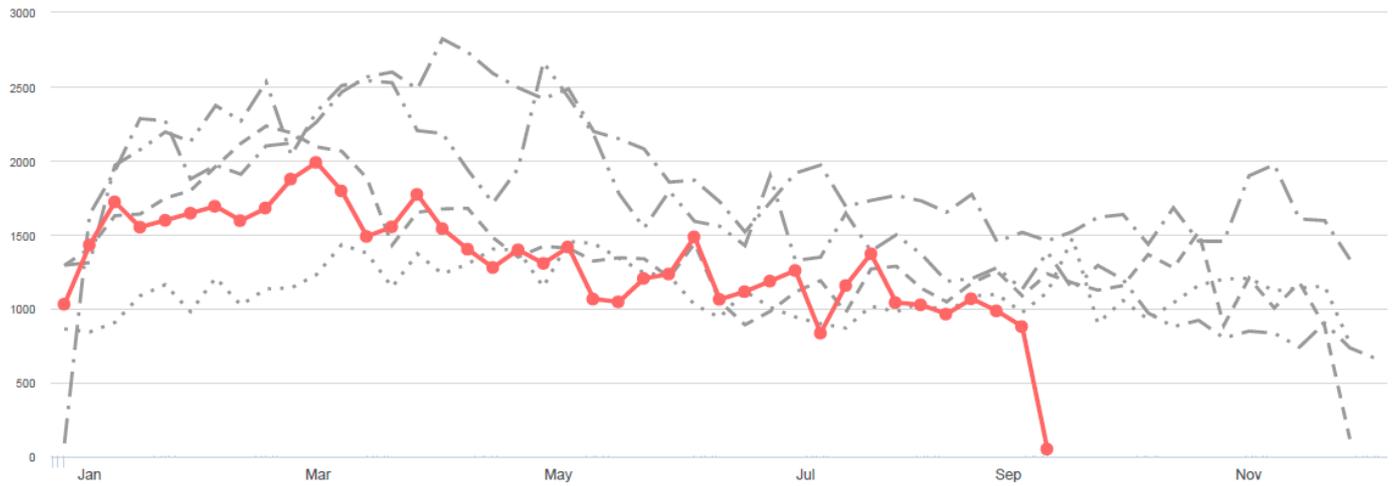


Alert threshold
Twice the average number of cases over the past 3 weeks. Source: IDSR

The number of AWD alerts triggered since week 1 of 2018 is 116, out of which 80 were verified. Maps above highlight the areas reporting AWD alerts from 2014 to 2018.

Acute Bloody Diarrhoea | Trends over time

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



Graph legend

- 2018
- - - 2017
- - - 2016
- - - 2015
- 2014

Key bloody diarrhoea indicators (2018)

52,785 Cases
23 Deaths
147 Alerts

Figure 6b | % morbidity



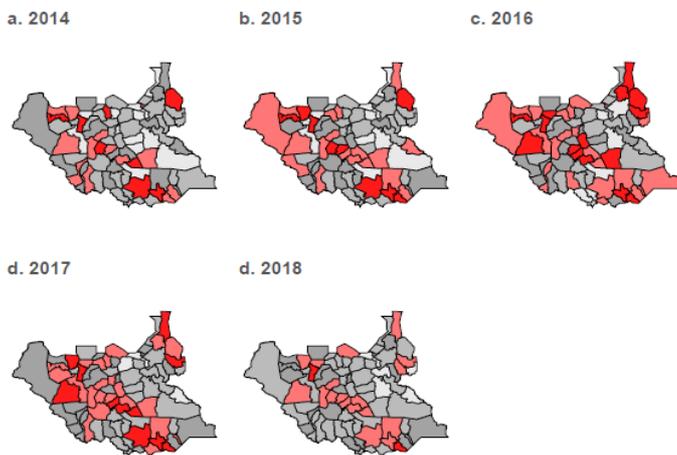
Figure 6c | Age breakdown



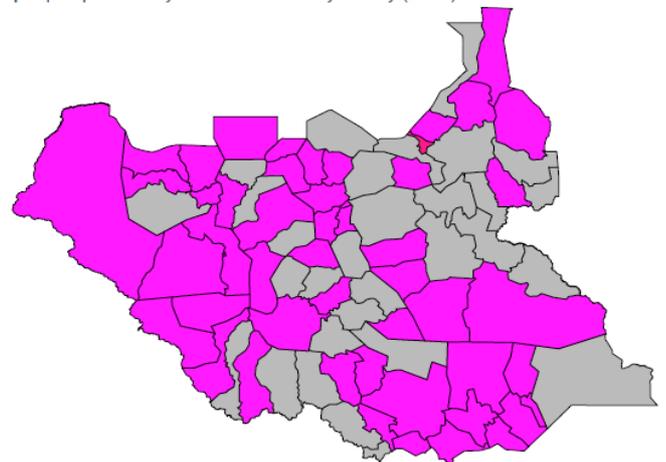
Since week 1 of 2018, a total of 52,785 cases of ABD have been reported country wide including 23 death. ABD trend for 2018 is below 2014, 2015, 2016, and 2017 respectively. Refer to figure 6a, above.

Acute Bloody Diarrhoea | Maps and Alert Management

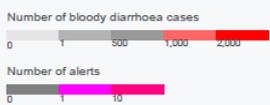
Map 6 | Map of bloody diarrhoea cases by county (2018)



Map 7 | Map of bloody diarrhoea alerts by county (2018)



Map legend



147 Alerts
103 Verified

Risk Assessment



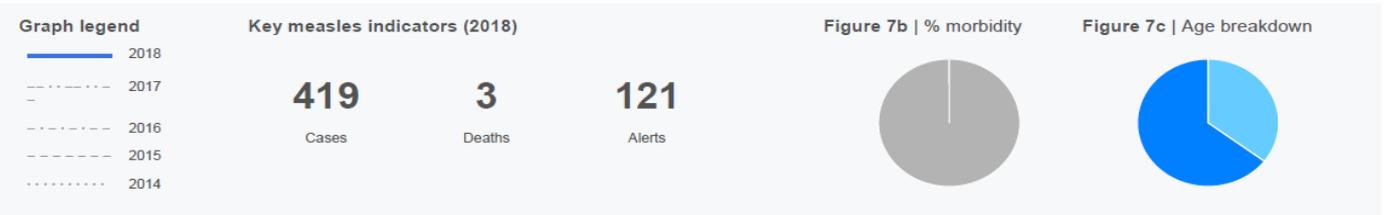
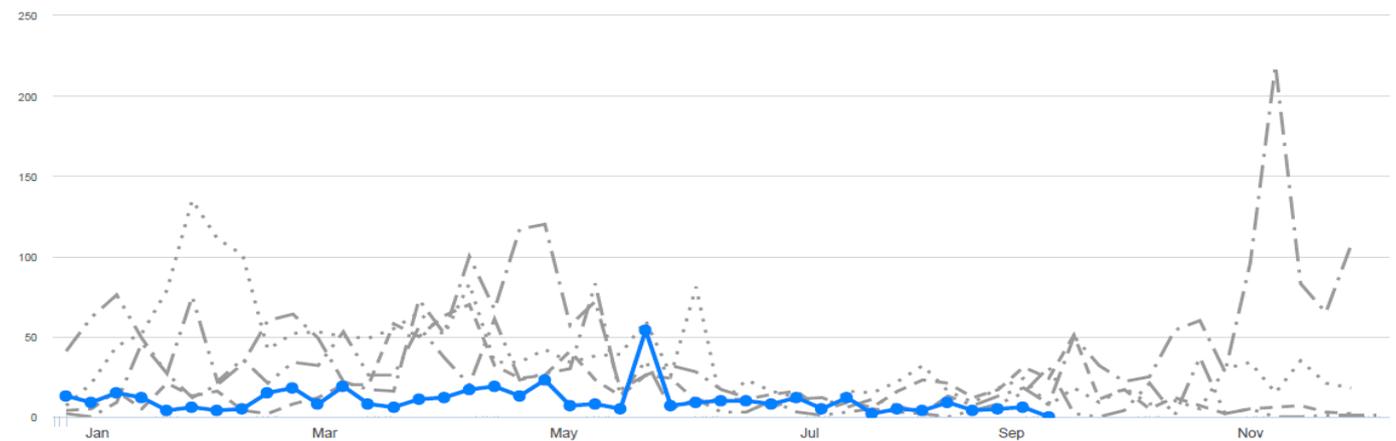
Alert threshold

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

Total of 147 alerts were generated since week 1 of 2018, of which 103 were verified by the county surveillance team. Maps indicating areas triggering alerts since 2014 to 2018 are shown above.

Measles | Trends over time

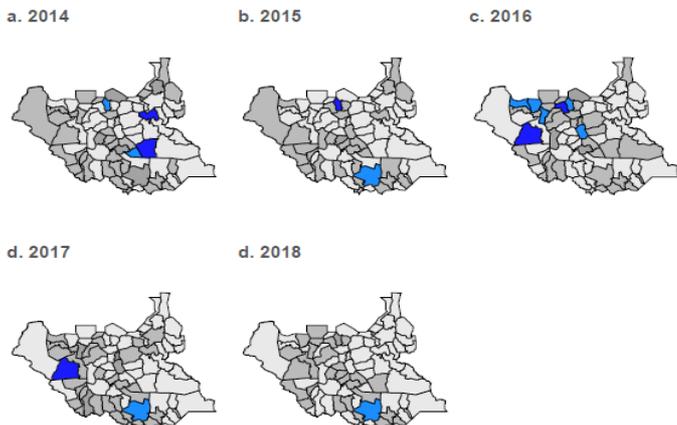
Figure 7a | Trend in number of cases over time (South Sudan)



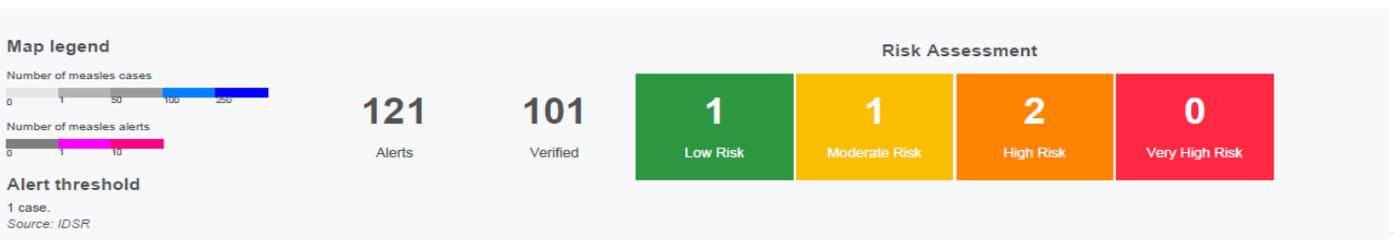
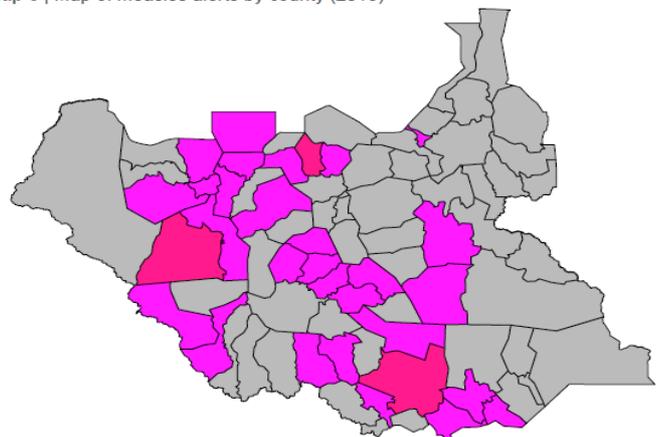
Since the beginning of 2018, at least 419 suspect measles cases including 3 death (CFR 0.74%) have been reported. . Of these, 292 suspect cases have undergone measles case-based laboratory-backed investigation with 245 samples collected out of which 26 measles IgM positive cases; 63 clinically confirmed cases; and 34 cases confirmed by epidemiological linkage.

Measles | Maps and Alert Management

Map 7 | Map of measles cases by county (2018)



Map 8 | Map of measles alerts by county (2018)



Since week 1 of 2018, 121 alerts of measles were triggered and 101 of those have been verified at county level. Maps of areas raising alerts from 2014 to 2018 are shown above.

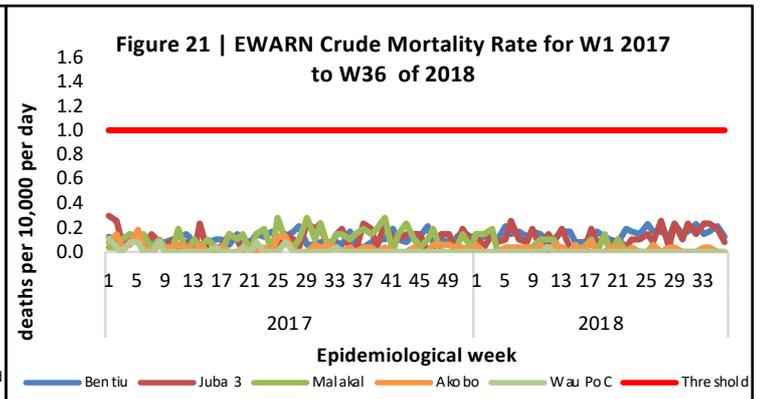
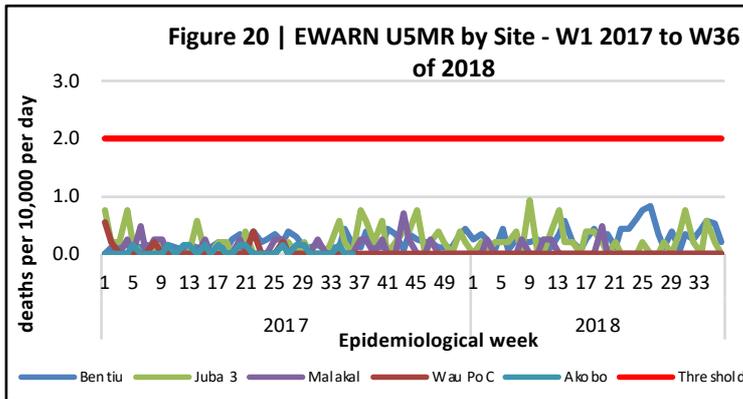
Table 6 | Proportional mortality by cause of death in IDPs W36 2018

Cause of Death by IDP site	Bentiu		Juba 3	Total deaths
	<5yrs	≥5yrs	≥5yrs	
GSW		1		1
malaria	1	1		2
HIV/AIDS	1	1		2
TB			1	1
Perinatal death	1			1
Anemia			1	1
Hep C		2		2
Drown in water		1		1
Severe Oedema		1		1
Total deaths	3	7	2	12

Among the IDPs, mortality data was received Bentiu PoC and UN House PoC in week 36. (Table 6). **A total of 12** deaths were reported during the week. Bentiu PoC reported 10 (83%) in the week. During the week, 3 (25%) deaths were recorded among children <5 years in (Table 6).

The causes of death during week 36 are shown in Table 6.

Mortality in the IDPs - Crude and Under five mortality rates



The U5MR in all the IDP sites that submitted mortality data in week 36 of 2018 is below the emergency threshold of 2 deaths per 10,000 per day (Fig. 20).

The Crude Mortality Rates [CMR] in all the IDP sites that submitted mortality data in week 36 of 2018 were below the emergency threshold of 1 death per 10,000 per day (Fig. 21).

Mortality in the IDPs - Overall mortality in 2018

Table 7 | Mortality by IDP site and cause of death as of W36, 2018

IDP site	acute watery diarrhoea	cancer	GSW	Heart Failure	Kala-Azar	malaria	Meningitis	death	pneumonia	Rabies	SAM	Sepsis	TB/HIV/AIDS	Trauma	HIV/AIDS	TB	Others	Grand Total
Bentiu	7	1	8	1	2	43	3	26	11	1	17	20	13	1	22	7	234	417
Juba 3	1	1		5		11			5		3		1		6	7	78	118
Malakal		1		3	1			1	1							2	17	26
Akobo			1		2	4			2		2	2	1	1			10	25
Wau PoC						1											0	1
Grand Total	8	3	9	9	5	59	3	27	19	1	22	22	15	2	28	16	339	587
Proportionate mortality [%]	1%	1%	2%	2%	1%	10%	1%	5%	3%	0%	4%	4%	3%	0%	5%	3%	58%	100%

A total of 587 deaths have been reported from the IDP sites in 2018 [Table 7](#).

The top causes of mortality in the IDPs in 2018 are shown in [Table 7](#).

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Technical support from WHO**

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Notes

WHO and the Ministry of Health gratefully acknowledge health cluster and health pooled fund (HPF) partners who have reported the data used in this bulletin. We would also like to thank ECHO and USAID for providing financial support.

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>

