

South Sudan

Integrated Disease Surveillance and Response (IDSR)

Annexes W35 2018 (Sep 03 – Sep 09)



**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**

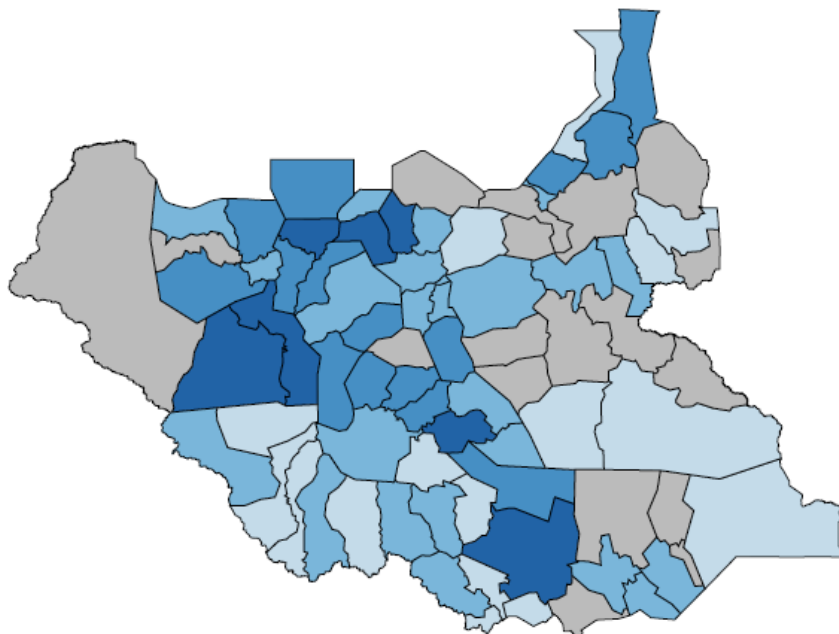
Slide 13 **Measles maps and alert management**

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 (W36 2018)

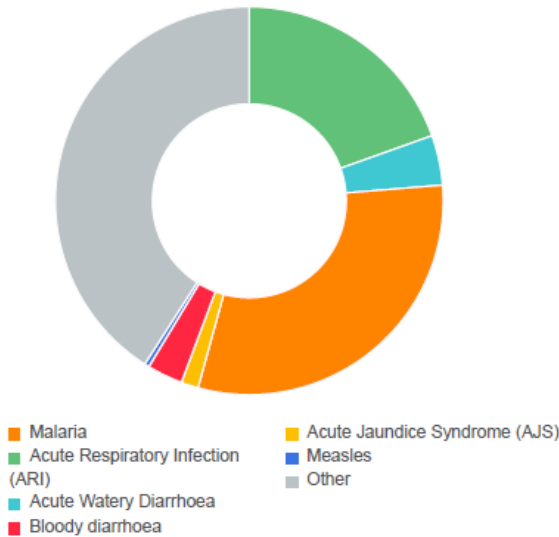


Hub	W36	2018
Aweil	10,986	464,760
Bentiu	20,447	573,353
Bor	6,124	391,688
Juba	15,603	433,259
Kwajok	30,916	937,167
Malakal	12,238	551,242
Rumbek	19,959	644,325
Torit	4,040	217,713
Wau	11,895	331,256
Yambio	9,634	417,099
South Sudan	141,842	4,961,862

The total consultation in the country since week 1 of 2018 is 4,961,862 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)

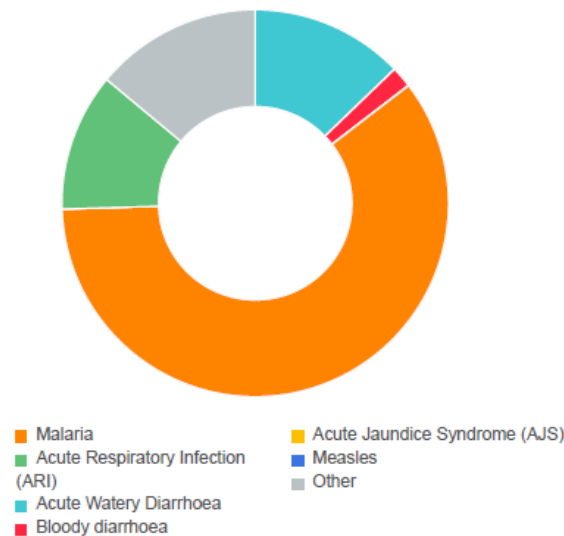


Syndrome	W36		2018	
	# deaths	% mortality	# deaths	% mortality
Malaria	20	90.9%	236	30.6%
ARI	1	4.5%	151	19.6%
AWD	0	0.0%	32	4.1%
Bloody diarrhoea	0	0.0%	23	3.0%
AJS	0	0.0%	11	1.4%
Measles	0	0.0%	3	0.4%
Other	1	4.5%	316	40.9%
Total deaths	22	100%	772	100%

Figure 1, above shows the proportional mortality for 2018, with malaria being the main cause of mortality accounting for 30.6% of the deaths since week 1 of 2018, followed by bloody diarrhoea, and acute watery diarrhoea.

Proportional morbidity

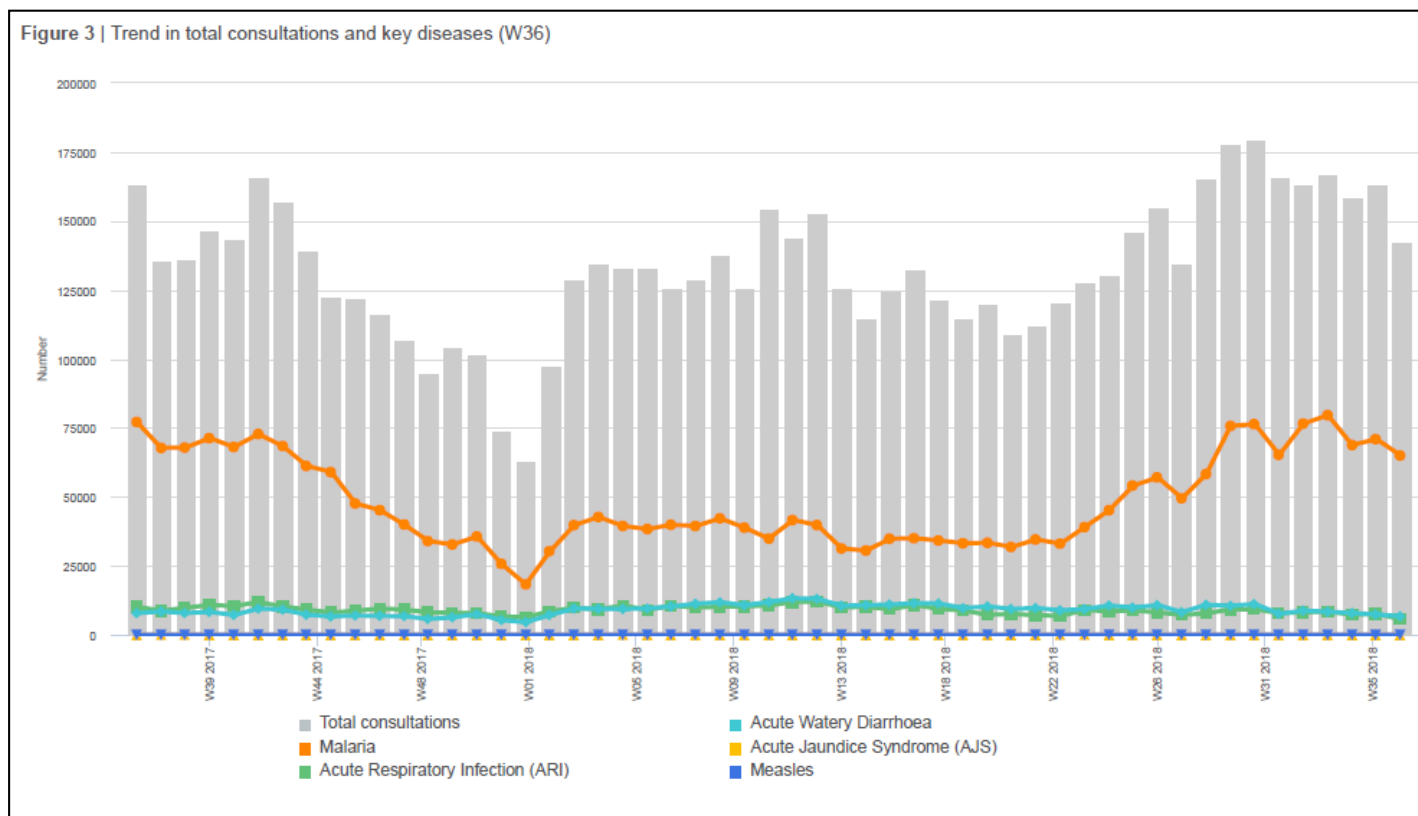
Figure 2 | Proportional morbidity (2018)



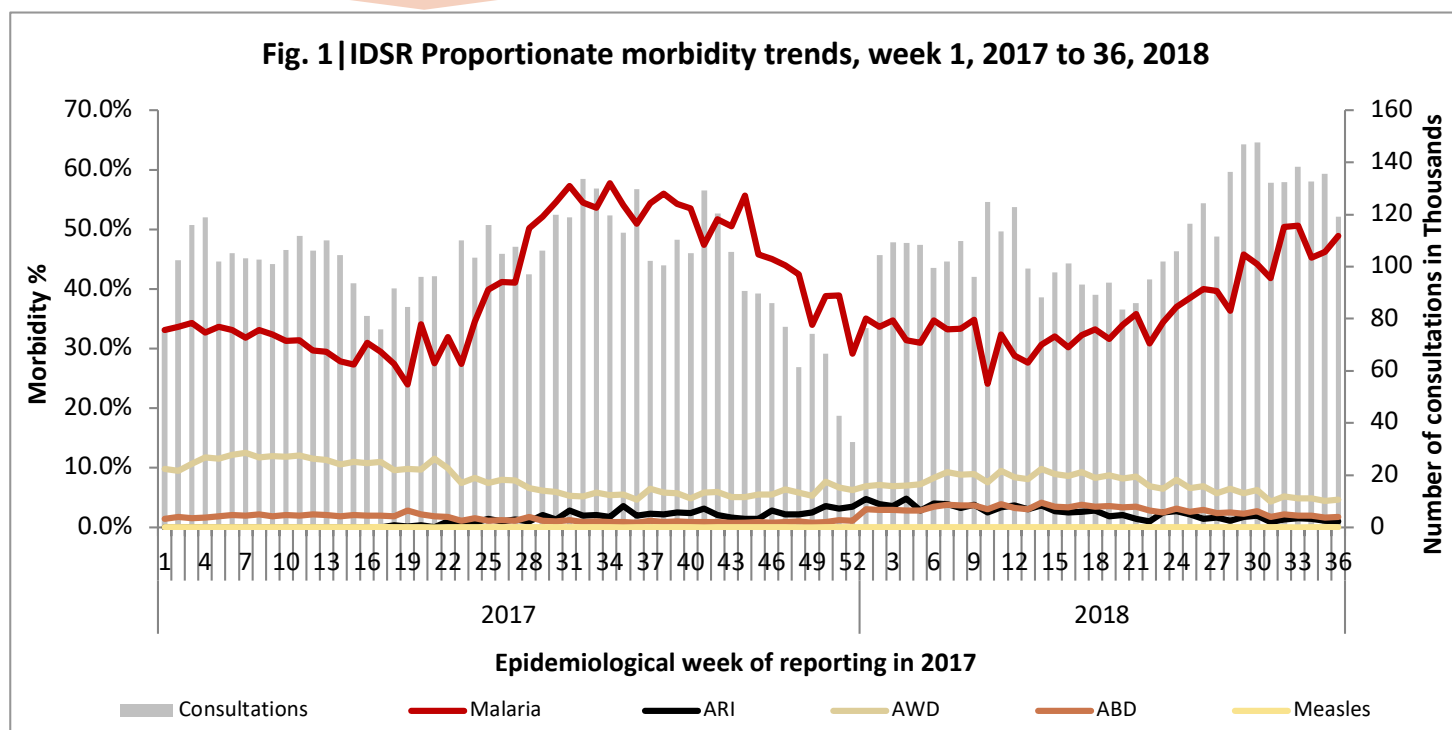
Syndrome	W36		2018	
	# cases	% morbidity	# cases	% morbidity
Malaria	65,016	74.4%	1,681,336	59.9%
ARI	5,678	6.5%	323,536	11.5%
AWD	6,746	7.7%	359,185	12.8%
Bloody diarrhoea	882	1.0%	49,603	1.8%
AJS	0	0.0%	196	0.0%
Measles	9	0.0%	404	0.0%
Other	9,081	10.4%	391,137	13.9%
Total cases	87,412	100%	2,805,397	100%

Figure 2, indicates the top causes of morbidity in the country, with malaria being the leading cause of morbidity 1,681,336 (59.9%) 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

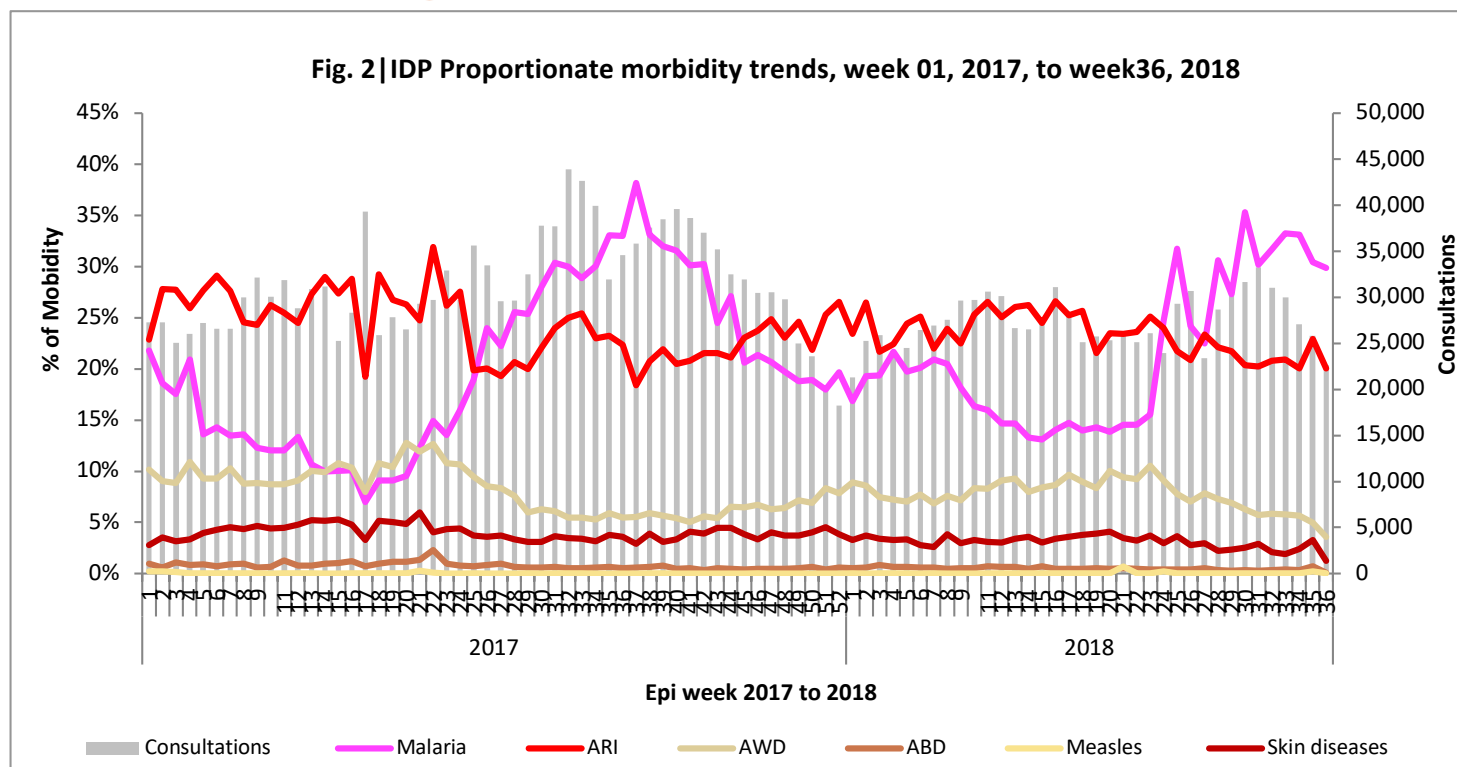


IDSR Proportionate morbidity trends - in relatively stable states



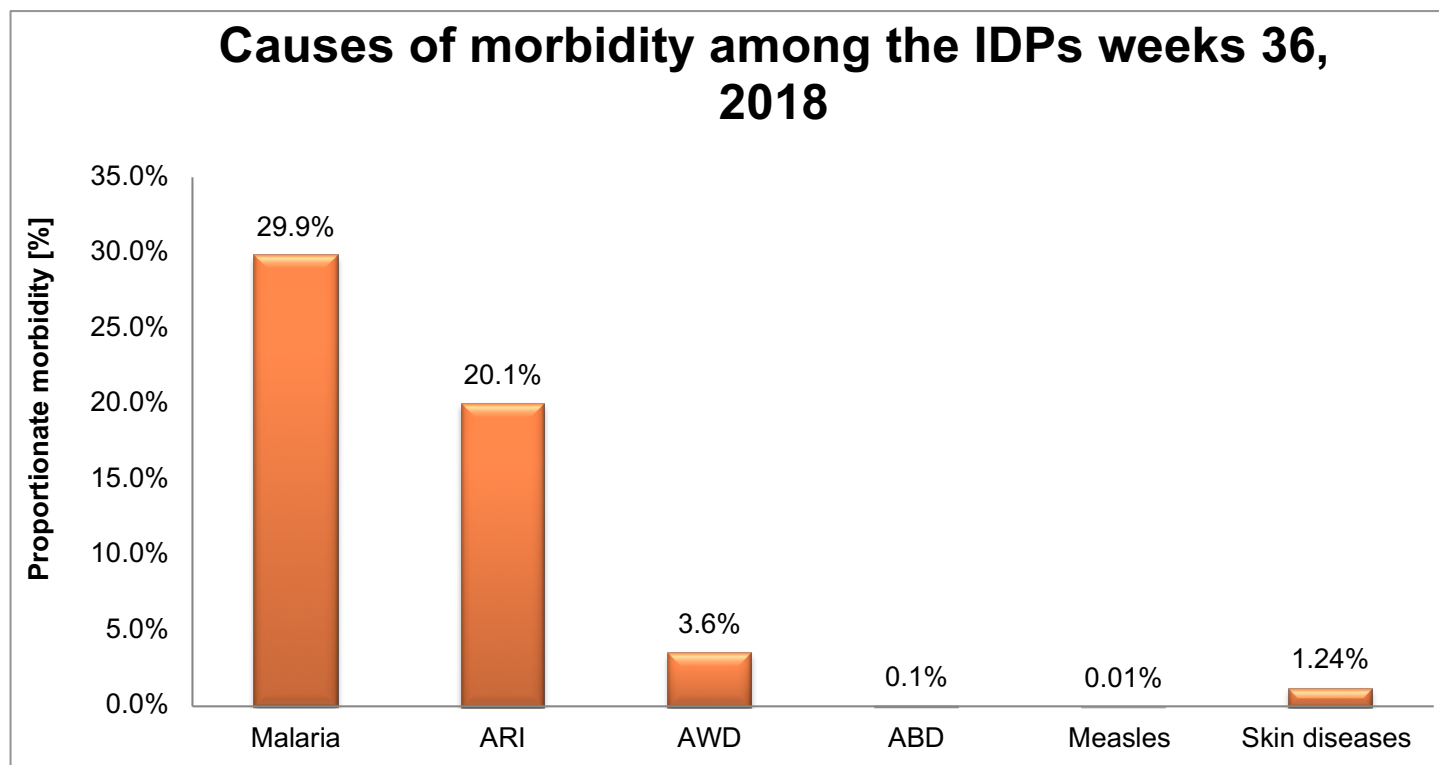
In the relatively stable states, malaria is the top cause of morbidity accounting for 48.9% of the consultations in week 36 (representing an increase from 46.3% in week 35).

IDP Proportionate morbidity trends - in displaced population



Among the IDPs, Malaria and ARI accounted for 29.9% and 20.1% of the consultations in week 36. The other significant causes of morbidity in the IDPs includes AWD, Skin diseases, and Measles.

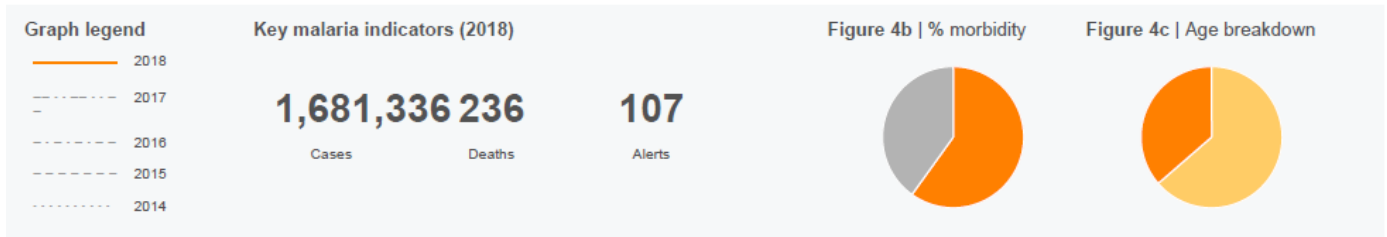
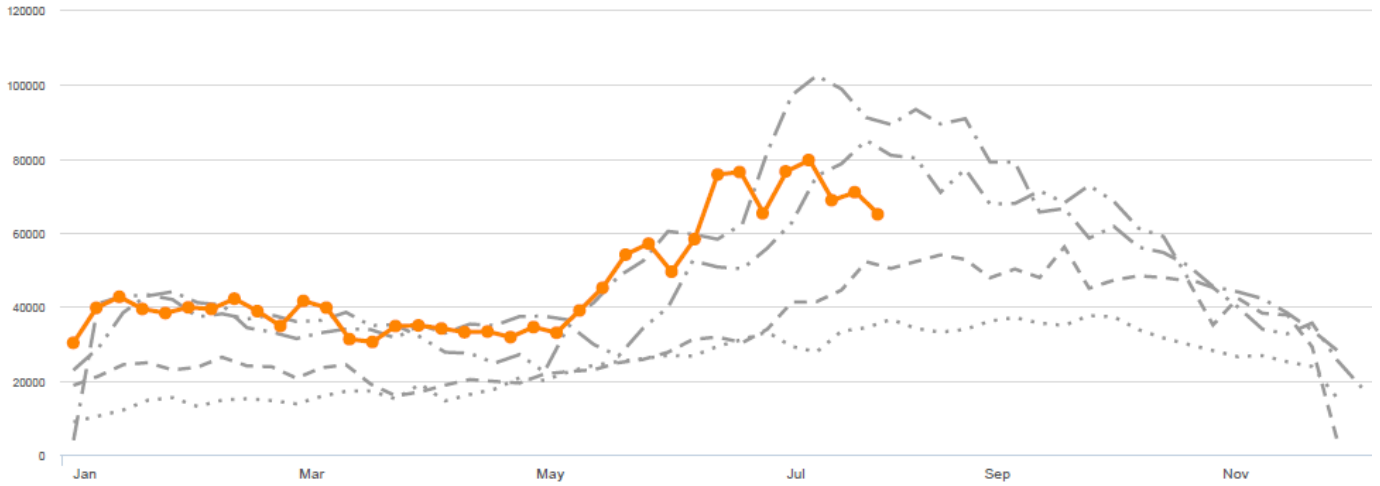
IDSR Proportionate morbidity trends - in displaced population



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

Malaria | Trends over time

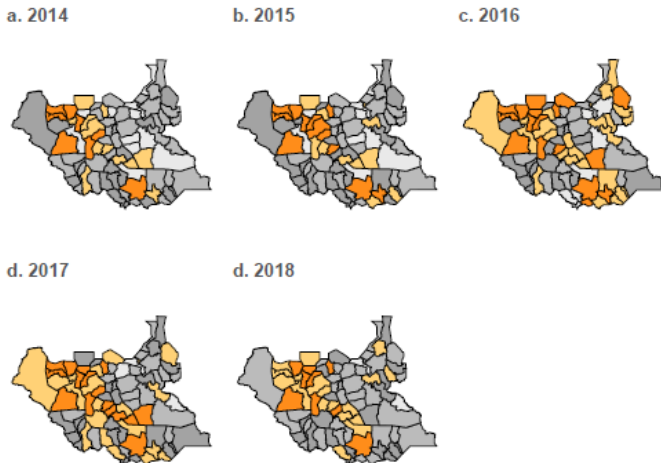
Figure 4a | Trend in number of cases over time (South Sudan)



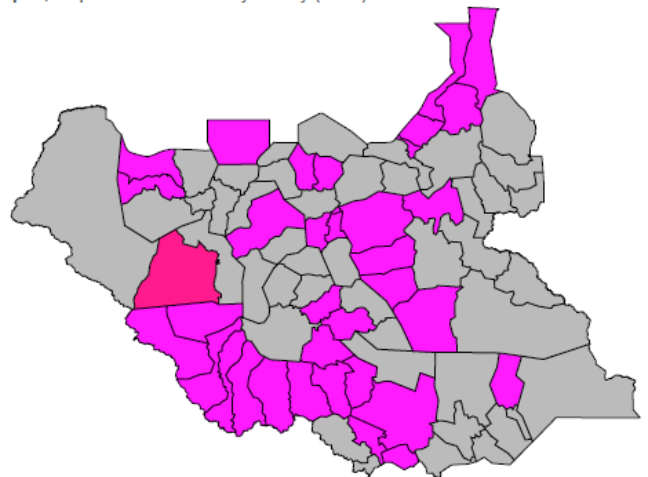
Malaria is the top course of Morbidity in the country, a total of 1,681,336 cases with 236 deaths registered since week 1 of 2018. malaria trend for week 36 of 2018 is above 2014, and 2015 as shown in the figure 4a, above.

Malaria | Maps and Alert Management

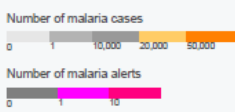
Map 2 | Map of malaria cases by county (2018)



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



Map legend



107
Alerts

71
Verified

Risk Assessment



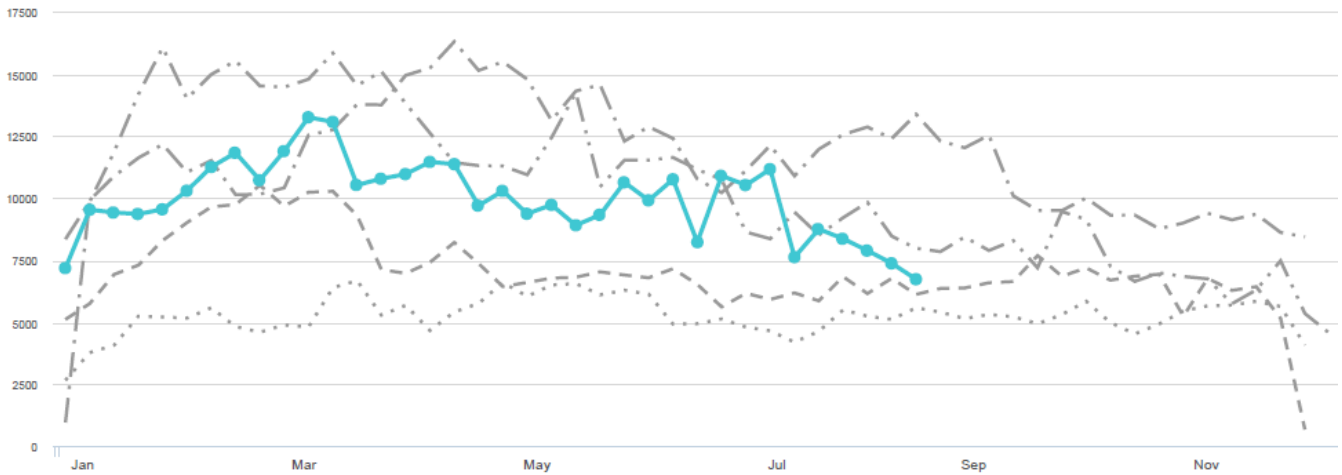
Alert threshold

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

Since the beginning of the year, a total of 107 malaria alerts have been triggered, 71 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)

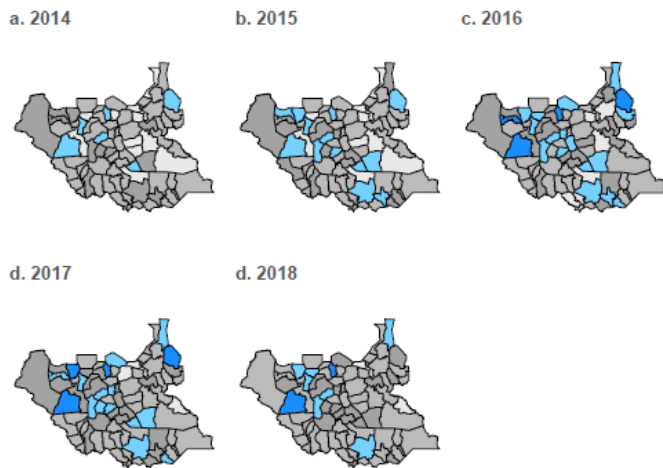


<p>Graph legend</p> <ul style="list-style-type: none"> — 2018 - - - 2017 - - - 2016 - - - 2015 2014 	<p>Key AWD indicators (2018)</p> <table border="0" style="margin: 0 auto;"> <tr> <td style="text-align: center;">359,185</td> <td style="text-align: center;">32</td> <td style="text-align: center;">104</td> </tr> <tr> <td style="text-align: center;">Cases</td> <td style="text-align: center;">Deaths</td> <td style="text-align: center;">Alerts</td> </tr> </table>	359,185	32	104	Cases	Deaths	Alerts	<p>Figure 5b % morbidity</p>	<p>Figure 5c Age breakdown</p>
359,185	32	104							
Cases	Deaths	Alerts							

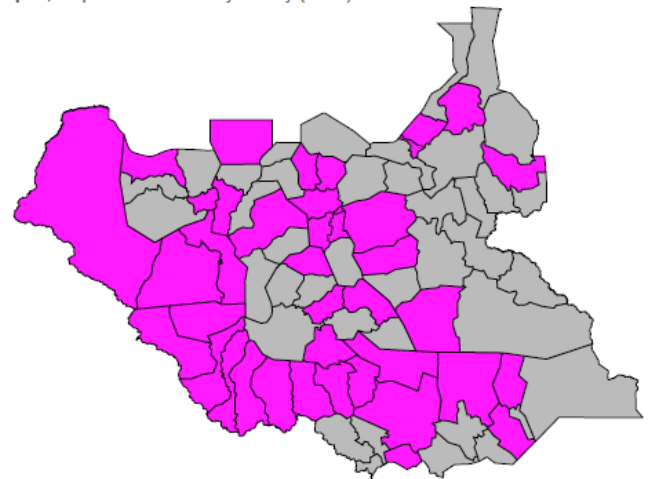
AWD is one of the top causes of morbidity in the country with 359,185 cases reported since week 1 of 2018 including 32 deaths. AWD trend for week 36 of 2018, is below 2016 and 2017, as shown in figure 5a, above.

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)

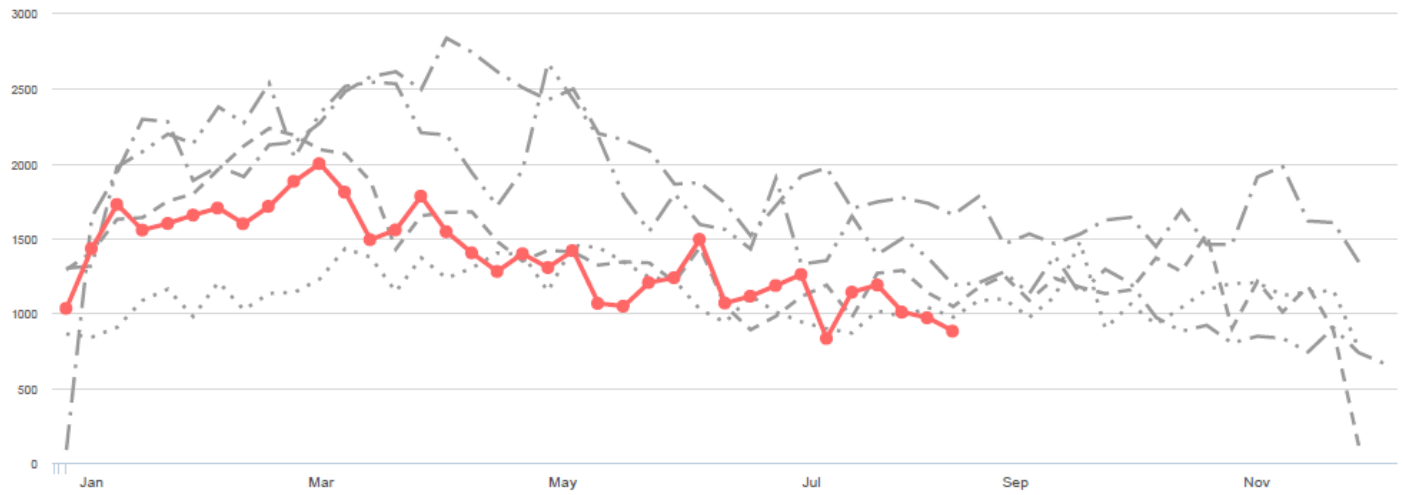


<p>Map legend</p> <p>Number of AWD cases</p> <p>Number of AWD alerts</p> <p>Alert threshold Twice the average number of cases over the past 3 weeks. Source: IDSR</p>	<p>104</p> <p>Alerts</p>	<p>70</p> <p>Verified</p>	<p>Risk Assessment</p> <table border="1" style="margin: 0 auto;"> <tr> <td style="text-align: center; background-color: #28a745; color: white;">0 Low Risk</td> <td style="text-align: center; background-color: #ffc107; color: white;">1 Moderate Risk</td> <td style="text-align: center; background-color: #ffc107; color: white;">0 High Risk</td> <td style="text-align: center; background-color: #dc3545; color: white;">0 Very High Risk</td> </tr> </table>	0 Low Risk	1 Moderate Risk	0 High Risk	0 Very High Risk
0 Low Risk	1 Moderate Risk	0 High Risk	0 Very High Risk				

The number of AWD alerts triggered since week 1 of 2018 is 104, out of which 70 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)

49,603

Cases

23

Deaths

134

Alerts

Figure 6b | % morbidity



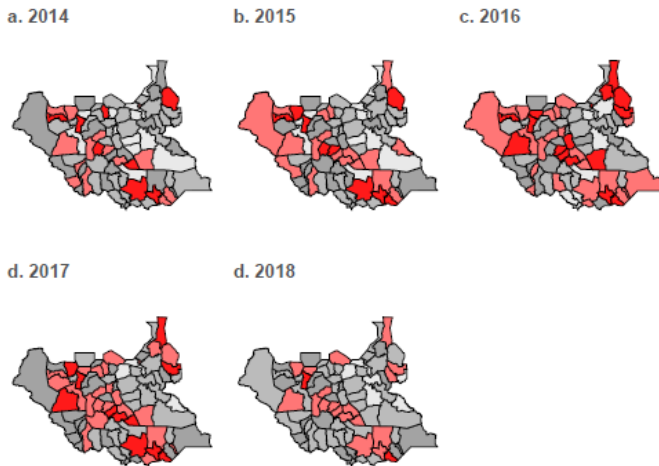
Figure 6c | Age breakdown



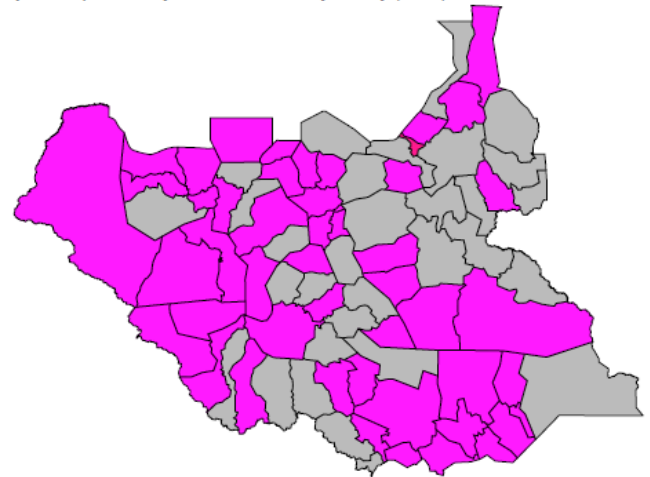
Since week 1 of 2018, a total of 49,603 cases of ABD have been reported country wide including 23 death. ABD trend for 2018 is below 2014, 2015, 2016, and 2017 respectively. Refer to figure 6a, above.

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

Number of bloody diarrhoea cases

Number of alerts

Alert threshold

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

134

Alerts

92

Verified

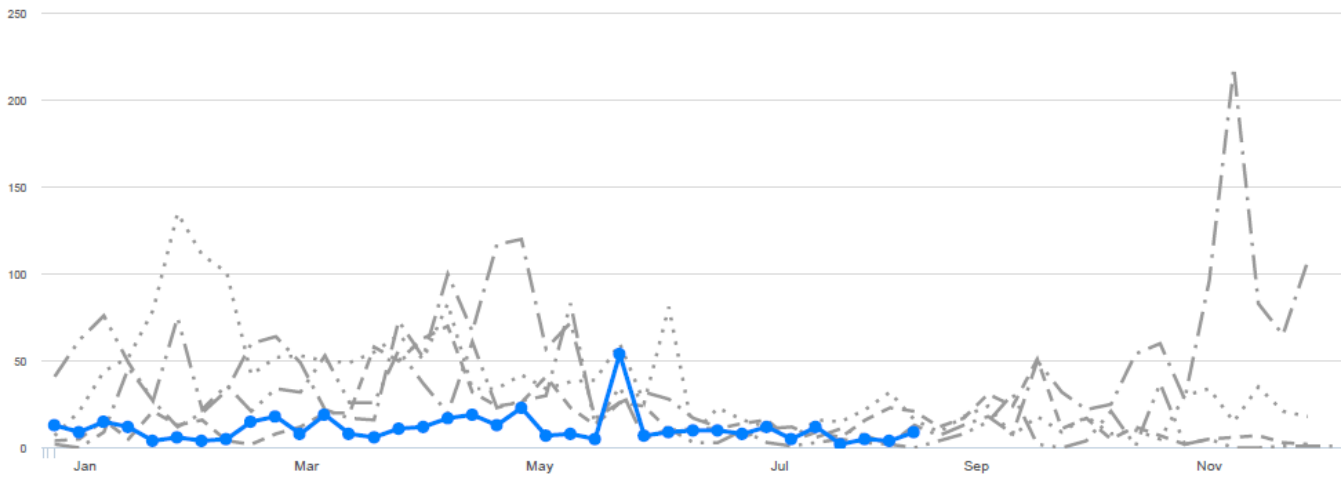
Risk Assessment



Total of 134 alerts were generated since week 1 of 2018, of which 92 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)



Graph legend

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

Key measles indicators (2018)

404 Cases
3 Deaths
110 Alerts

Figure 7b | % morbidity



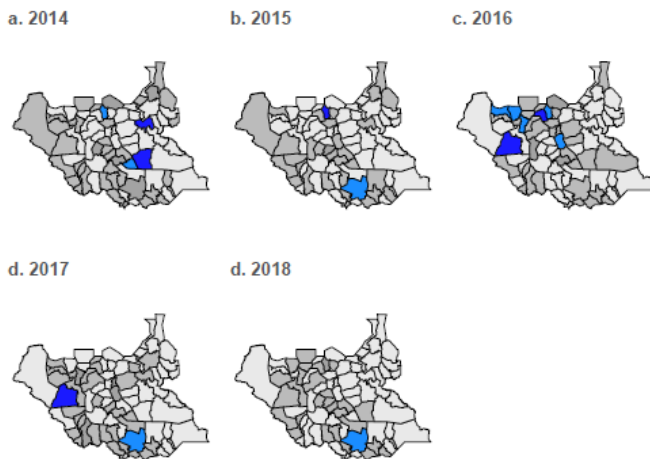
Figure 7c | Age breakdown



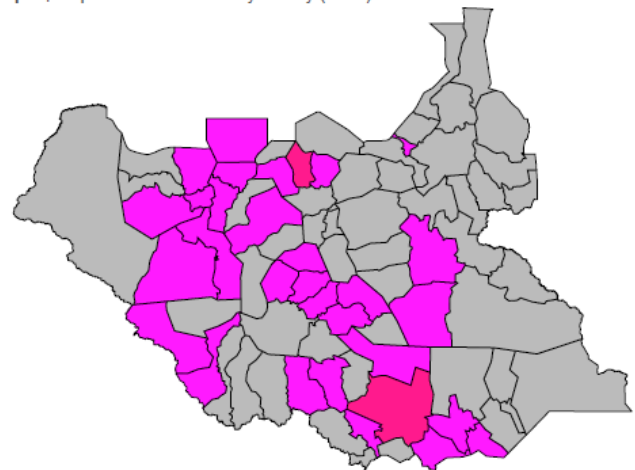
Since the beginning of 2018, at least 404 suspect measles cases including 3 death (CFR 0.74%) have been reported. . Of these, 292 suspect cases have undergone measles case-based laboratory-backed investigation with 245 samples collected out of which 26 measles IgM positive cases; 63 clinically confirmed cases; and 34 cases confirmed by epidemiological linkage.

Measles | Maps and Alert Management

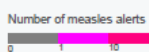
Map 7 | Map of measles cases by county (2018)



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



Map legend



Alert threshold

1 case.
Source: IDSR

110 Alerts
91 Verified

Risk Assessment



Since week 1 of 2018, 110 alerts of measles were triggered and 91 of those have been verified at county level. Maps of areas raising alerts from 2014 to 2018 are shown above.

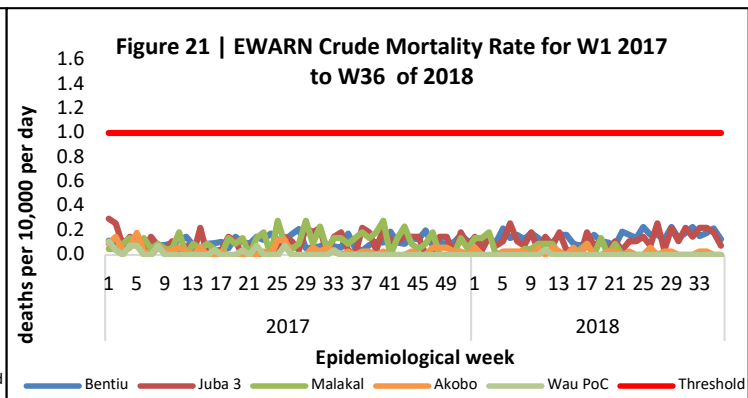
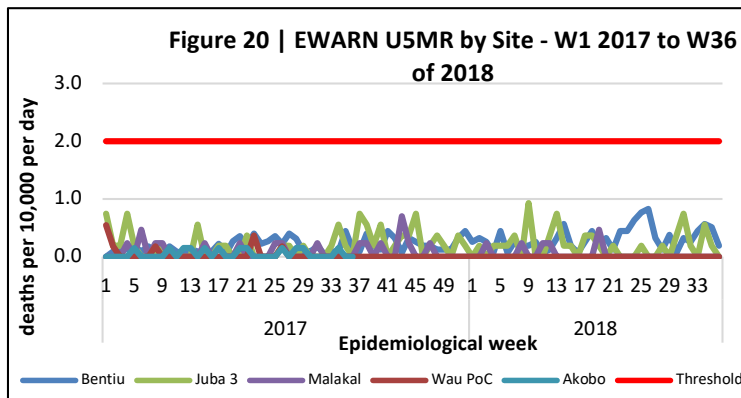
Table 6 | Proportional mortality by cause of death in IDPs W35 2018

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](#).

**This bulletin is produced by the Ministry of Health with
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Notes

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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>

