

South Sudan

Integrated Disease Surveillance and Response (IDSR)

Annexes W14 2018 (April 02 – April 08)



**World Health
Organization**
South Sudan



Ministry of Health
Republic of South Sudan

Access and Utilisation

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Indicator-based surveillance

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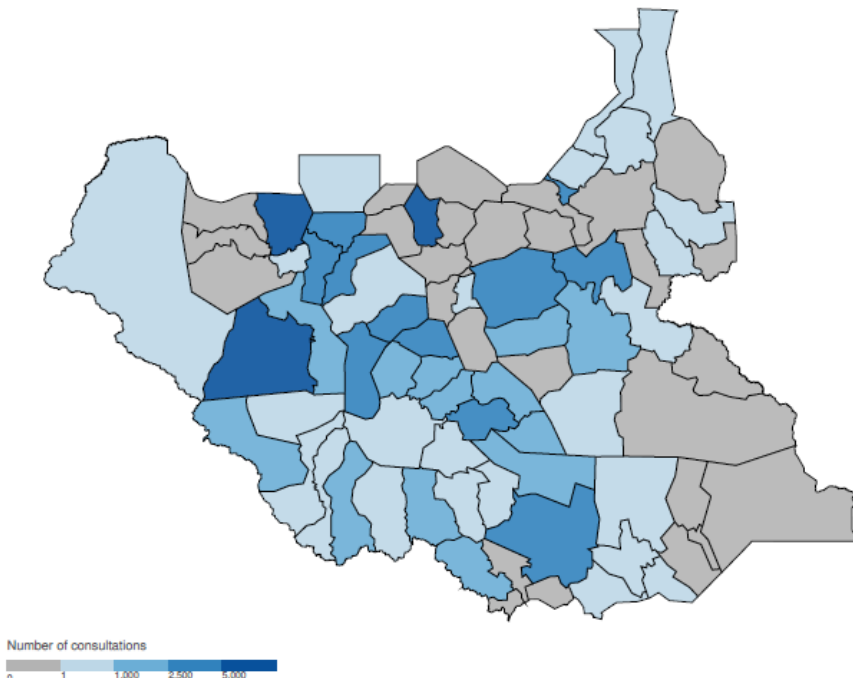
Slide 13 **Measles maps and alert management**

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 (W14 2018)

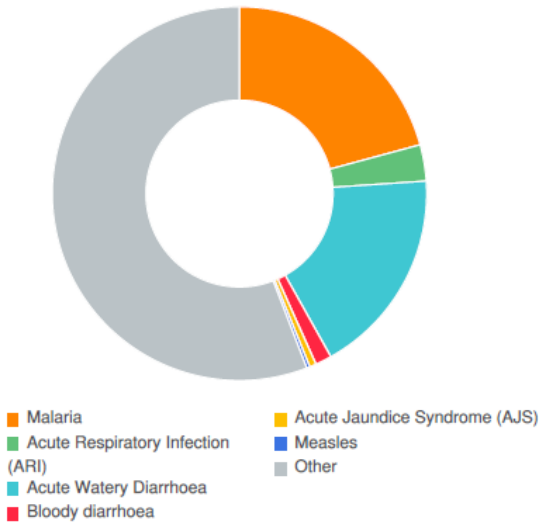


Hub	W14	2018
Aweil	8,277	209,841
Bentiu	7,669	235,160
Bor	12,514	162,236
Juba	6,762	128,824
Kwajok	17,624	340,990
Malakal	7,283	153,763
Rumbek	15,726	220,516
Torit	2,885	72,839
Wau	9,051	109,725
Yambio	9,805	145,445
South Sudan	97,596	1,779,339

The total consultation in the country since week 1 of 2018 is 1,779,339, by hub, Bentiu registered the highest number of consultations as indicated in the table above. The total number of consultations by county is indicated in the map above. See the key for more information.

Proportional mortality

Figure 1 | Proportional mortality (2018)

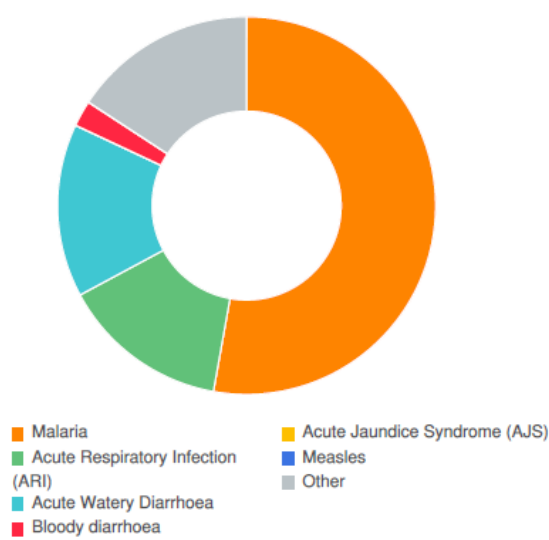


Syndrome	W14		2018	
	# deaths	% mortality	# deaths	% mortality
Malaria	3	100.0%	73	20.8%
ARI	0	0.0%	11	3.1%
AWD	0	0.0%	63	17.9%
Bloody diarrhoea	0	0.0%	5	1.4%
AJS	0	0.0%	2	0.6%
Measles	0	0.0%	1	0.3%
Other	0	0.0%	196	55.8%
Total deaths	3	100%	351	100%

Figure 1, above shows the proportional mortality for 2018, with malaria being the main cause of mortality accounting for 20.8% of the deaths since week 1 of 2018, followed by bloody diarrhoea, and acute watery diarrhoea.

Proportional morbidity

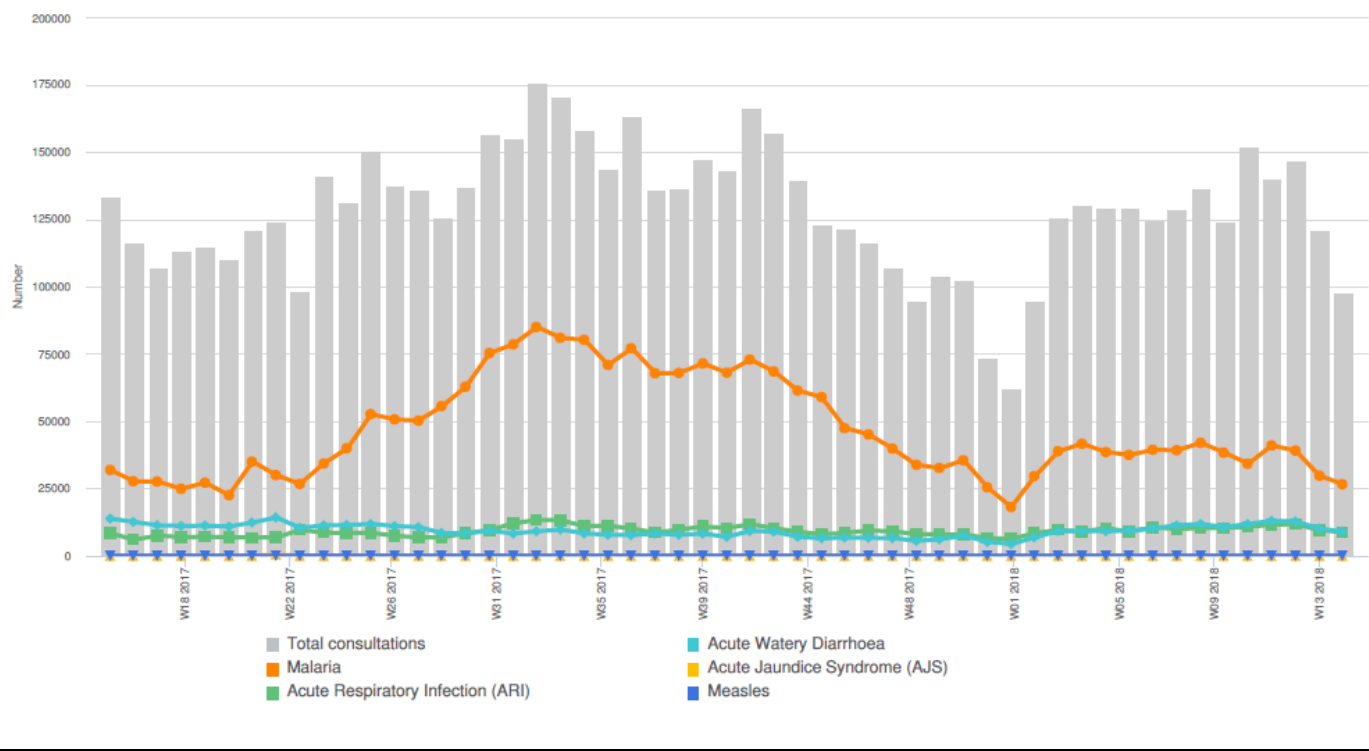
Figure 2 | Proportional morbidity (2018)



Syndrome	W14		2018	
	# cases	% morbidity	# cases	% morbidity
Malaria	26,638	46.4%	516,254	52.8%
ARI	8,763	15.3%	140,218	14.3%
AWD	9,001	15.7%	144,839	14.8%
Bloody diarrhoea	1,273	2.2%	21,862	2.2%
AJS	1	0.0%	66	0.0%
Measles	6	0.0%	142	0.0%
Other	11,717	20.4%	153,995	15.8%
Total cases	57,399	100%	977,376	100%

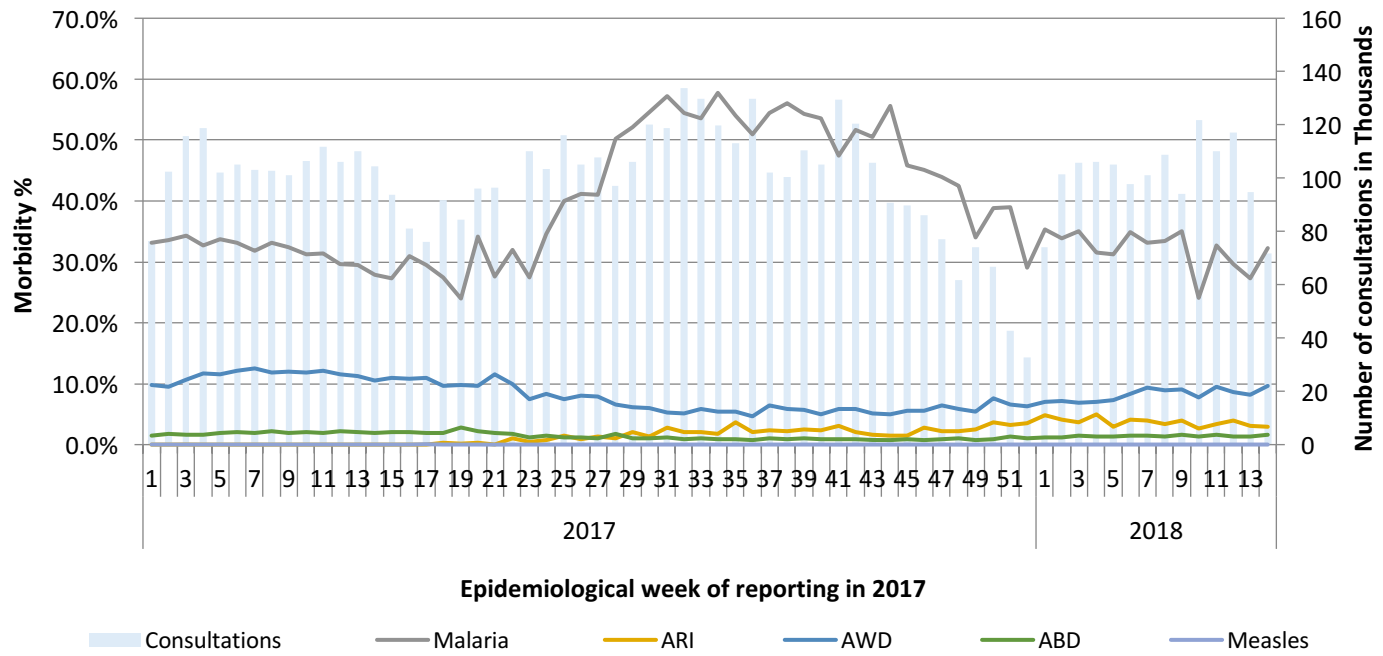
Figure 2, indicates the top causes of morbidity in the country, with malaria being the leading cause of morbidity 516,254 (55.8%) followed by ARI, AWD and ABD respectively since week 1 of 2018. refer to the figure above for more information.

Figure 3 | Trend in total consultations and key diseases (W14)



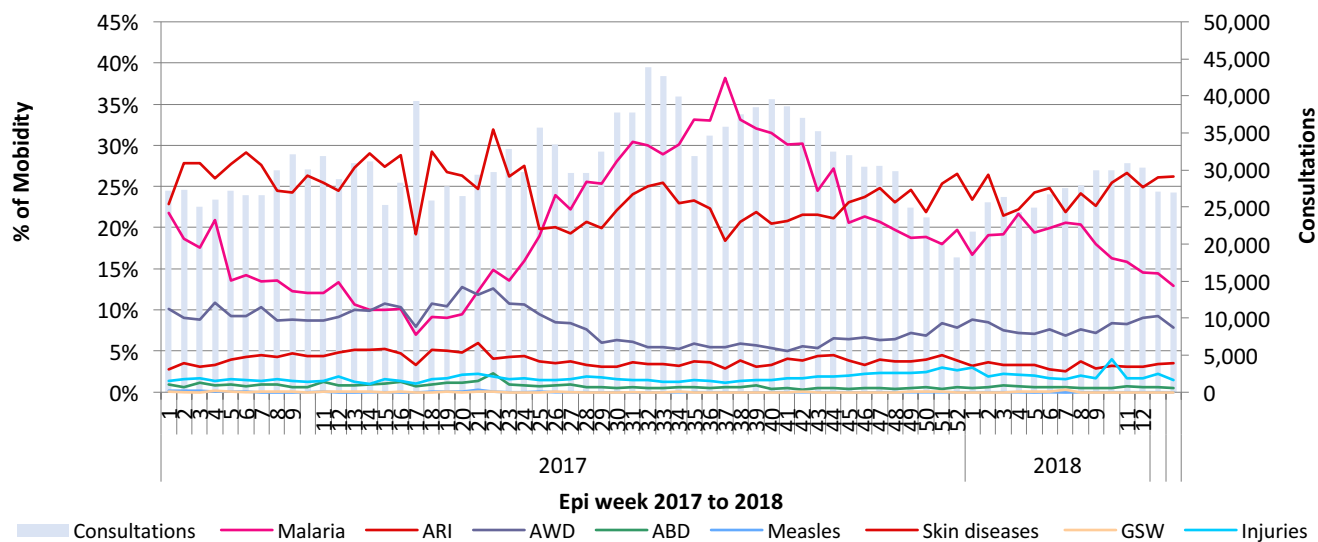
IDSR Proportionate morbidity trends - in relatively stable states

Fig. 1 | IDSR Proportionate morbidity trends, week 1, 2017 to 14, 2018



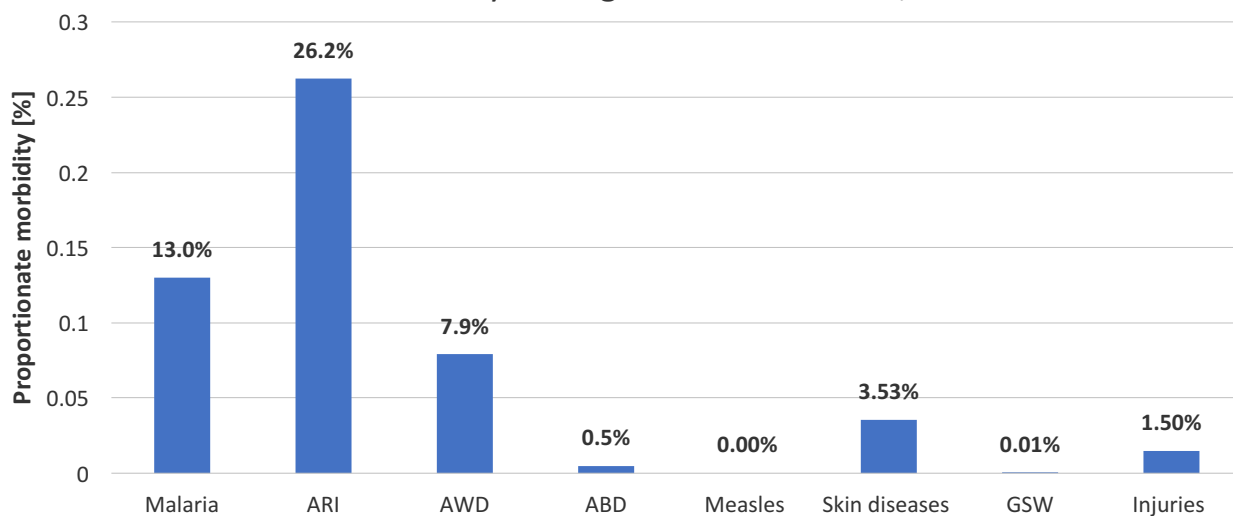
In the relatively stable states, malaria is the top cause of morbidity accounting for 32.3% of the consultations in week 14 (representing an increase from 27.3% in week 13).

Fig. 2 | IDP Proportionate morbidity trends, week 01, 2017, to week 14, 2018



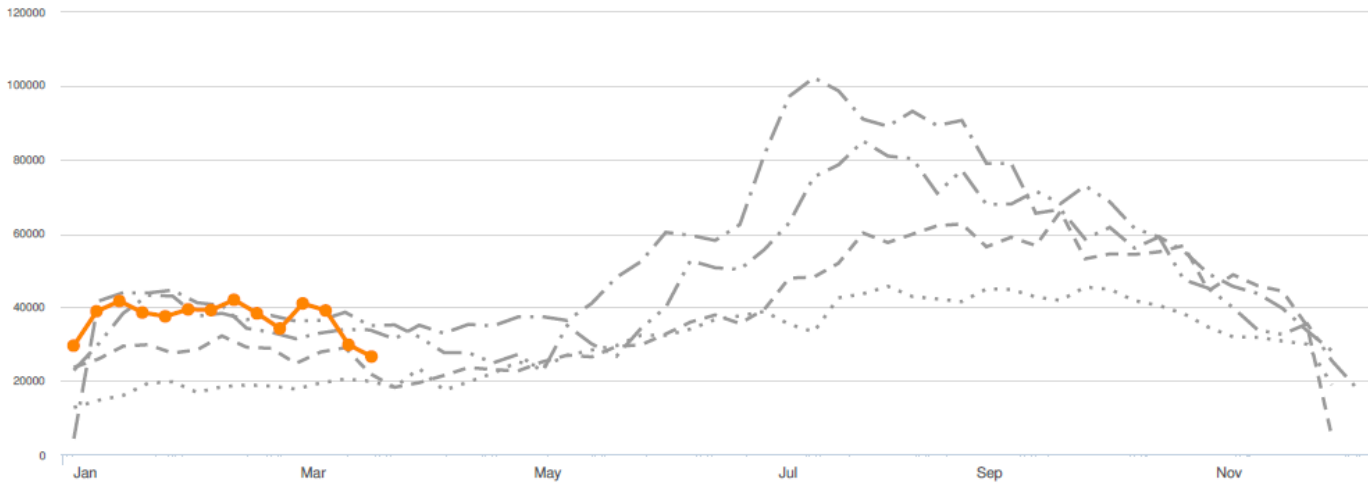
Among the IDPs, ARI and malaria accounted for 26.2% and 13.0% of consultations in week 14. The other significant causes of morbidity in the IDPs include AWD, skin diseases, and injuries.

Causes of morbidity among the IDPs weeks 14, 2018



The top causes of morbidity in the IDPs in 2018 include ARI, malaria, AWD, skin diseases, injuries, and ABD.

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

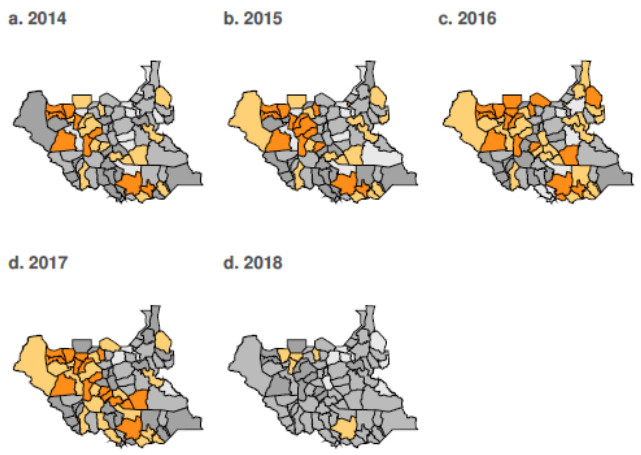


<p>Graph legend</p> <ul style="list-style-type: none"> —●— 2018 - - - - - 2017 - - - - - 2016 - - - - - 2015 - - - - - 2014 	<p>Key malaria indicators (2018)</p> <div style="display: flex; justify-content: space-around; font-size: 24px; font-weight: bold;"> 516,254 73 32 </div> <div style="display: flex; justify-content: space-around; font-size: 12px;"> Cases Deaths Alerts </div>	<p>Figure 4b % morbidity</p>	<p>Figure 4c Age breakdown</p>
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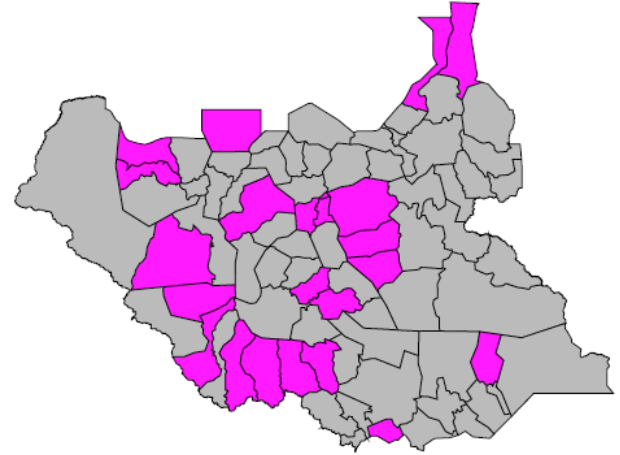
Malaria is the top course of Morbidity in the country, a total of 516,254 cases with 73 deaths registered since week 1 of 2018. malaria trend for week 14 of 2018 is below 2016 and 2017 as shown in the figure 4a, above.

Malaria | Maps and Alert Management

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



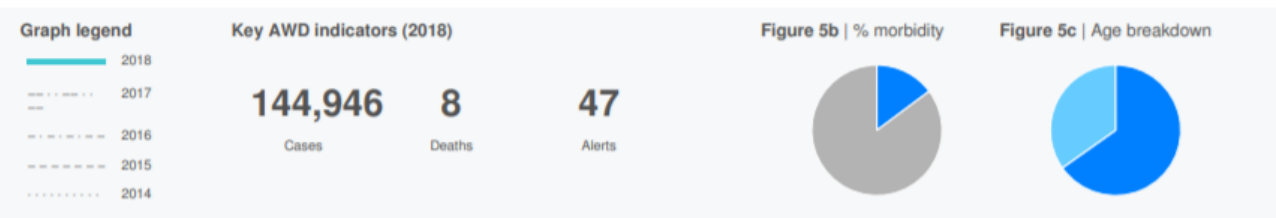
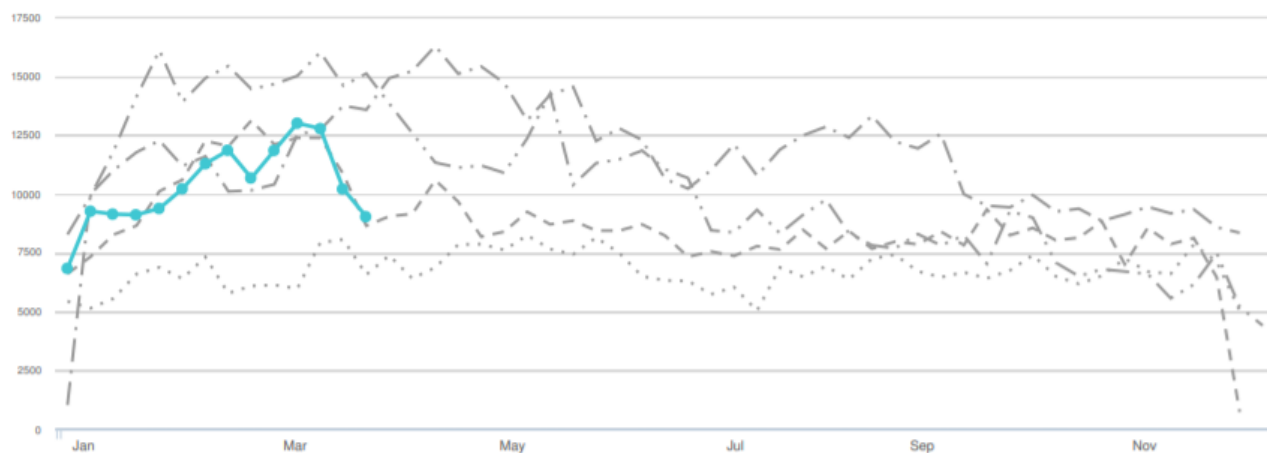
Map 3 | Map of malaria alerts by county (2018)



<p>Map legend</p> <p>Number of malaria cases</p> <p>Number of malaria alerts</p> <p>Alert threshold Twice the average number of cases over the past 3 weeks. Source: IDSR</p>	<p>32</p> <p>Alerts</p>	<p>17</p> <p>Verified</p>	<p>Risk Assessment</p> <table border="1" style="width: 100%; text-align: center;"> <tr> <td style="background-color: green; color: white; padding: 5px;">1 Low Risk</td> <td style="background-color: yellow; color: black; padding: 5px;">0 Moderate Risk</td> <td style="background-color: orange; color: black; padding: 5px;">0 High Risk</td> <td style="background-color: red; color: white; padding: 5px;">0 Very High Risk</td> </tr> </table>	1 Low Risk	0 Moderate Risk	0 High Risk	0 Very High Risk
1 Low Risk	0 Moderate Risk	0 High Risk	0 Very High Risk				

Since the beginning of the year, a total of 32 malaria alerts have been triggered, 17 of those were verified. The Maps above indicate the location reporting malaria alerts from 2014, 2015, 2016, 2017, and 2018.

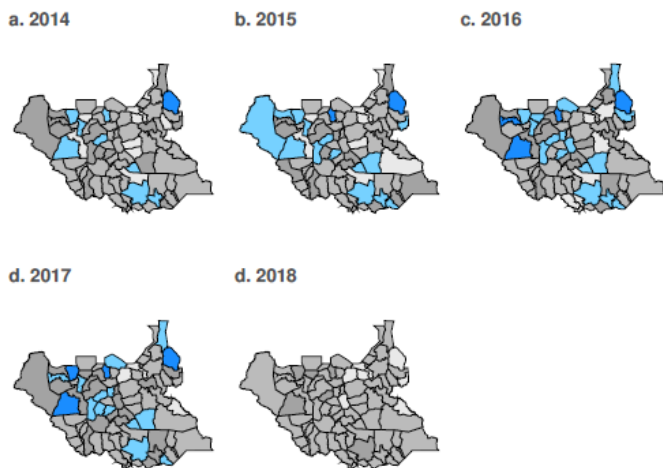
Figure 5a | Trend in AWD cases over time (South Sudan)



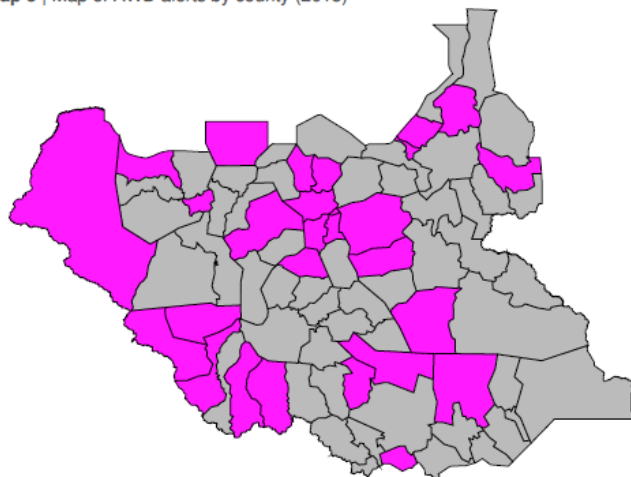
AWD is one of the top causes of morbidity in the country with 144,946 cases reported since week 1 of 2018 including 8 deaths. AWD trend for 2018 is below 2016, and 2017 as shown in figure 5a, above.

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



47

Alerts

24

Verified

Risk Assessment



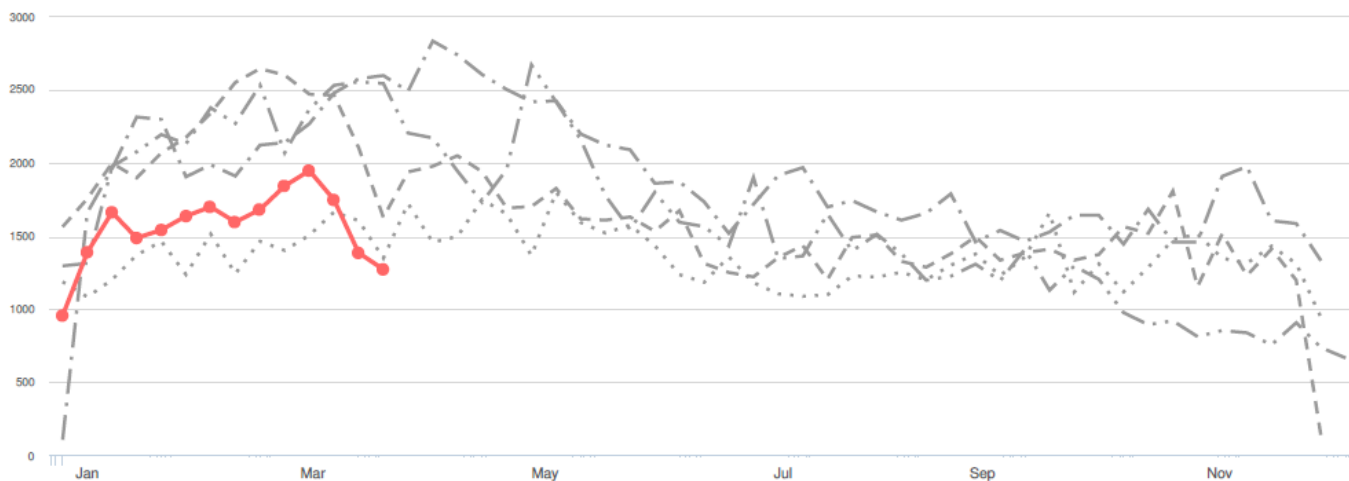
Alert threshold

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 47, out of which 24 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)

21,862 Cases
5 Deaths
62 Alerts

Figure 6b | % morbidity



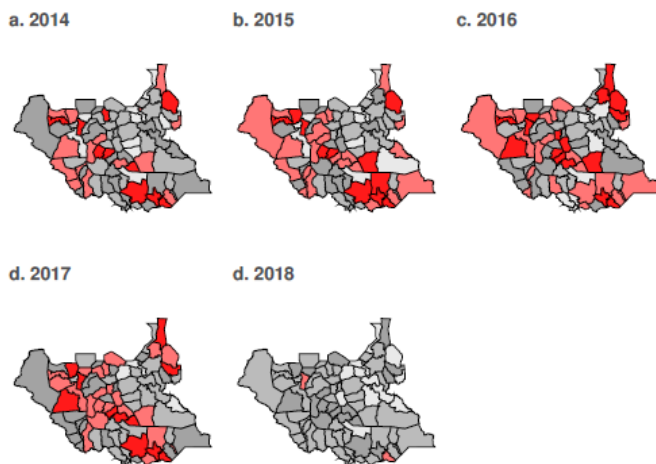
Figure 6c | Age breakdown



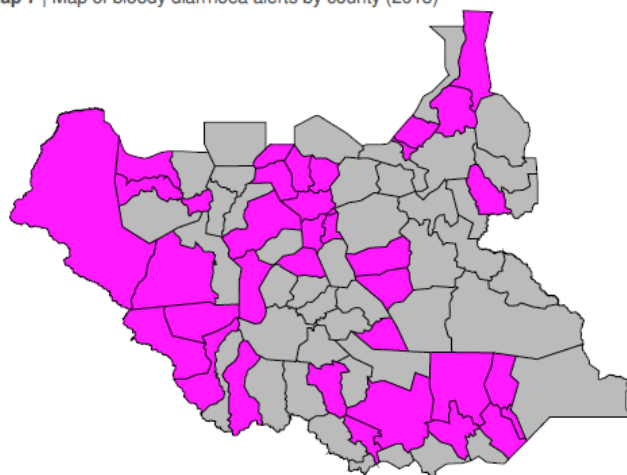
Since week 1 of 2018, a total of 21,862 cases of ABD have been reported country wide including 5 death. ABD trend for 2018 is below 2015, 2016, and 2017 respectively. Refer to figure 6a, above.

Acute Bloody Diarrhoea | Maps and Alert Management

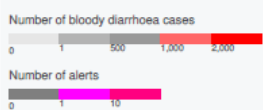
Map 6 | Map of bloody diarrhoea cases by county (2018)



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



Map legend



62 Alerts
23 Verified

Risk Assessment

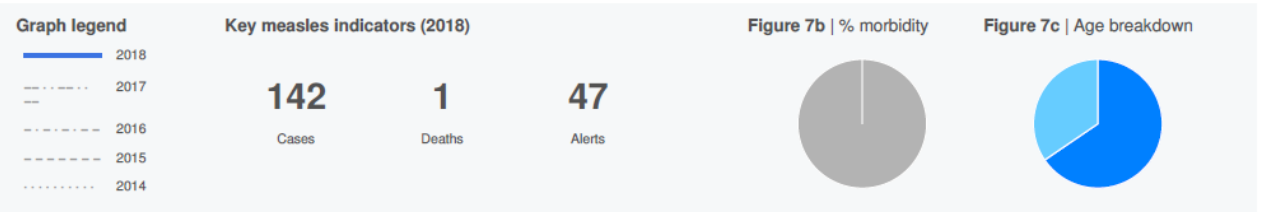
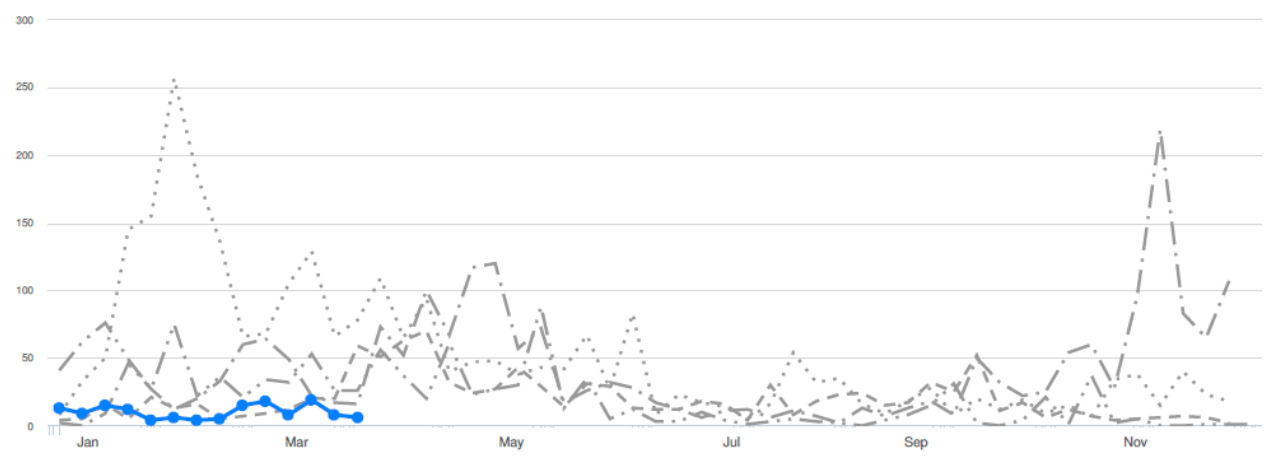


Alert threshold

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

Total of 62 alerts were generated since week 1 of 2018, of which 23 were verified by the county surveillance team. Maps indicating areas triggering alerts since 2014 to 2018 are shown above.

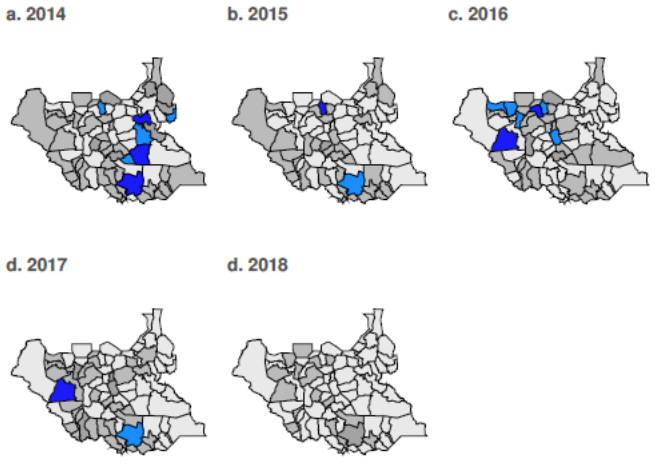
Figure 7a | Trend in number of cases over time (South Sudan)



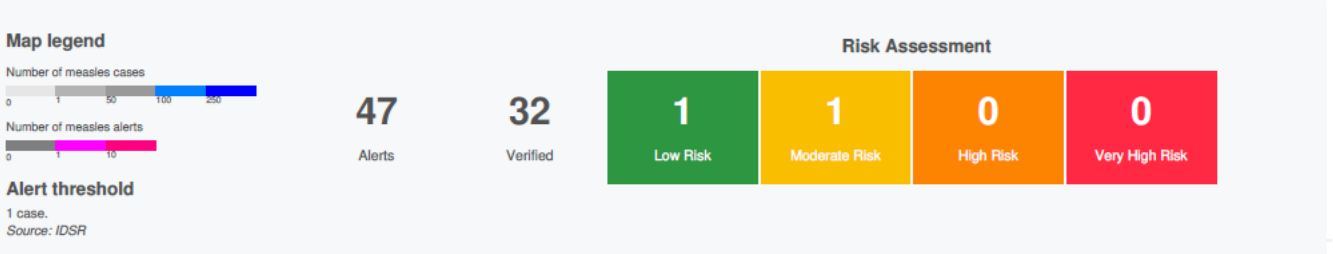
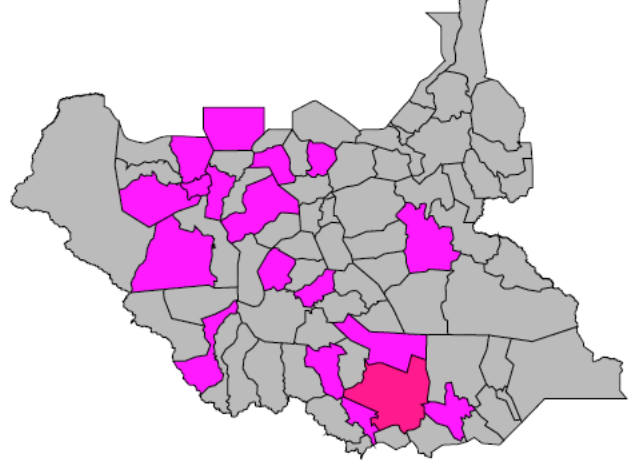
Since the beginning of 2018, at least 142 suspect measles cases including 1 death (CFR 0.8%) have been reported. Of these, 84 suspect cases have undergone measles case-based laboratory-backed investigation with 68 samples collected out of which 14 measles IgM positive cases; 14 clinically confirmed cases; and 3 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, 47 alerts of measles were triggered and 32 of those have been verified at county level. Maps of areas raising alerts from 2014 to 2018 are shown above.

Figure 20 | EWARN U5MR by Site - W1 2017 to W14 of 2018

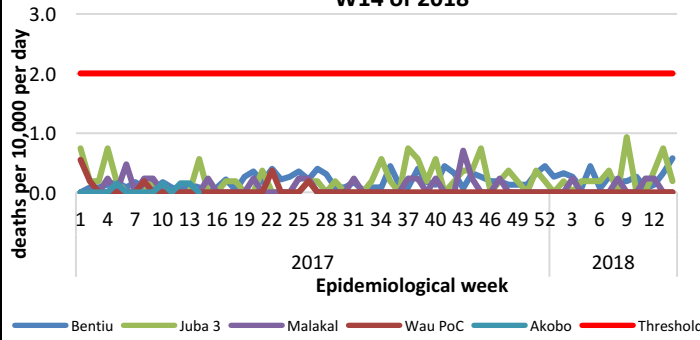
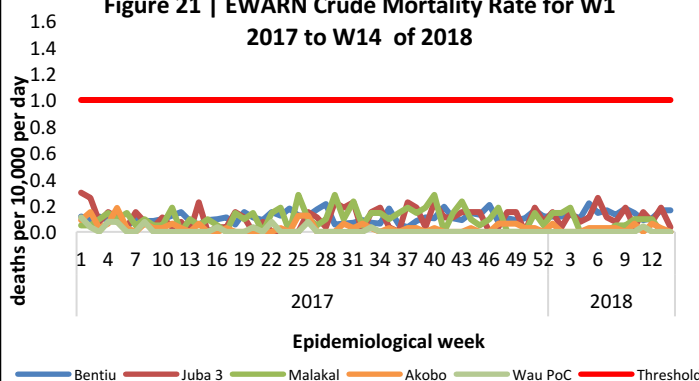


Figure 21 | EWARN Crude Mortality Rate for W1 2017 to W14 of 2018



The U5MR in all the IDP sites that submitted mortality data in week 14 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 14 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 W14, 2018

IDP site	acute watery diarrhoea	Cancer Gunshot wound	Heart Failure	Kala-Azar	malaria	Meningitis	perinatal death	pneumonia	Rabies	SAM	Sepsis	TB/HIV/AIDS	Trauma	HIV/AIDS	TB	Others	Grand Total	
Bentiu	4	1	2	1	5	3	14	4	1	4	14	7	1	10	7	74	153	
Juba 3	1	1		1	5			2		1		1		4	7	21	44	
Malakal		1		2	1		1								2	11	18	
Akobo			1		2	1		1			2		1			3	11	
Wau PoC					1											0	1	
Grand Total	5	3	3	4	4	12	3	15	7	1	5	16	8	2	14	16	109	227
Proportionate mortality [%]	2%	1%	1%	2%	2%	5%	1%	7%	3%	0%	2%	7%	4%	1%	6%	7%	48%	100%

- A total of 227 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](#).

For more help and support, please contact:

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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>

