

South Sudan

Integrated Disease Surveillance and Response (IDSR)

Annexes W15 2018 (April 09 – April 15)



**World Health
Organization**
South Sudan



Ministry of Health
Republic of South Sudan

Access and Utilisation

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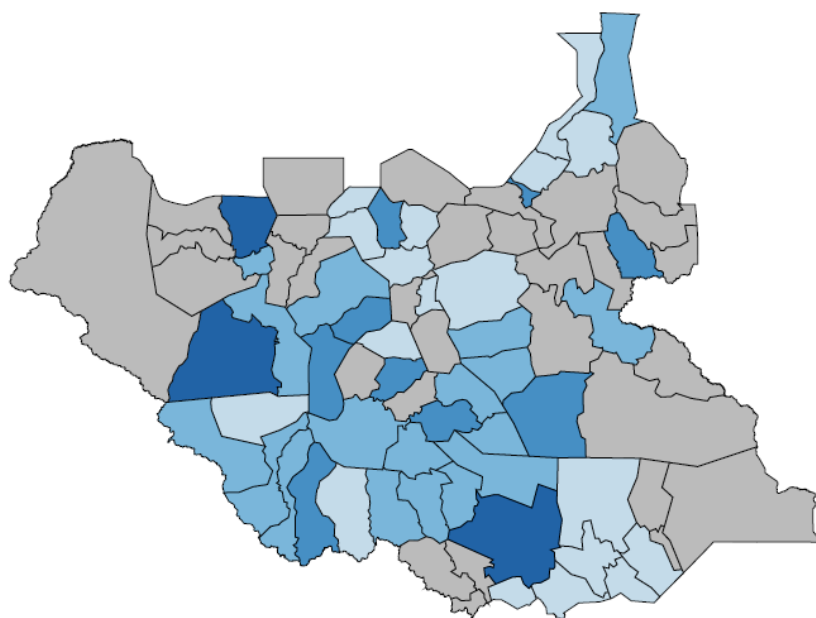
Slide 13 **Measles maps and alert management**

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 (W15 2018)

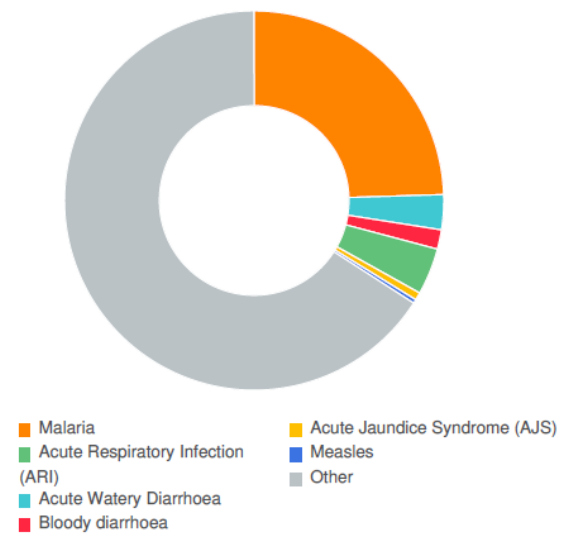


Hub	W15	2018
Aweil	8,231	218,072
Bentiu	7,195	247,574
Bor	8,357	171,641
Juba	7,709	136,533
Kwajok	7,995	348,985
Malakal	11,047	175,689
Rumbek	10,631	231,147
Torit	2,968	79,423
Wau	8,441	118,166
Yambio	12,874	158,417
South Sudan	85,448	1,885,647

The total consultation in the country since week 1 of 2018 is 1,885,647, 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)

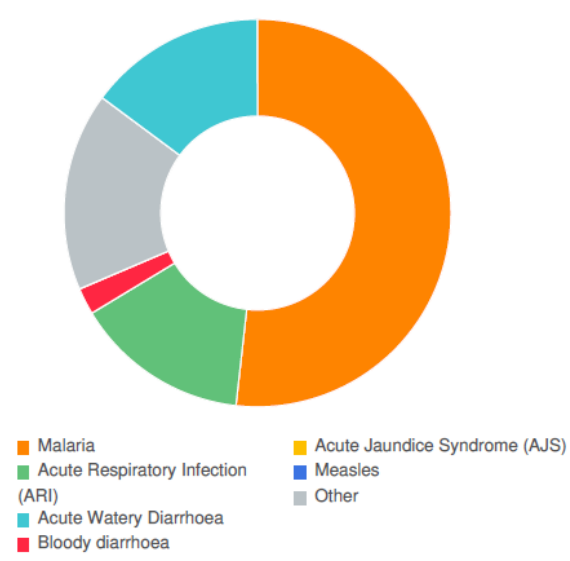


Syndrome	W15		2018	
	# deaths	% mortality	# deaths	% mortality
Malaria	1	20.0%	74	24.5%
ARI	0	0.0%	12	4.0%
AWD	1	20.0%	9	3.0%
Bloody diarrhoea	0	0.0%	5	1.7%
AJS	0	0.0%	2	0.7%
Measles	0	0.0%	1	0.3%
Other	3	60.0%	199	65.9%
Total deaths	5	100%	302	100%

Figure 1, above shows the proportional mortality for 2018, with malaria being the main cause of mortality accounting for 24.5% of the deaths since week 1 of 2018, followed by bloody diarrhoea, and acute watery diarrhoea.

Proportional morbidity

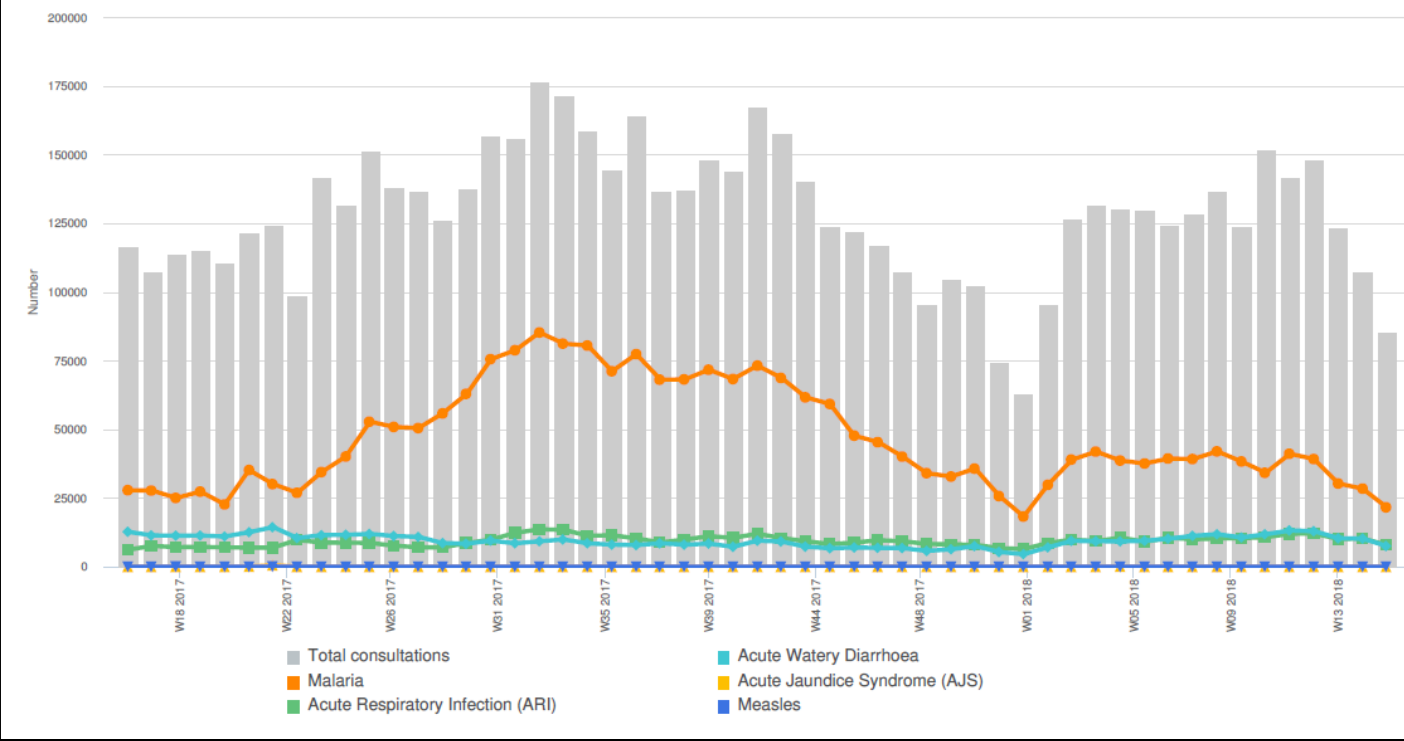
Figure 2 | Proportional morbidity (2018)



Syndrome	W15		2018	
	# cases	% morbidity	# cases	% morbidity
Malaria	21,664	41.8%	541,363	51.8%
ARI	7,983	15.4%	152,308	14.6%
AWD	7,552	14.6%	155,034	14.8%
Bloody diarrhoea	1,114	2.1%	23,341	2.2%
AJS	0	0.0%	66	0.0%
Measles	11	0.0%	153	0.0%
Other	13,547	26.1%	172,967	16.5%
Total cases	51,871	100%	1,045,232	100%

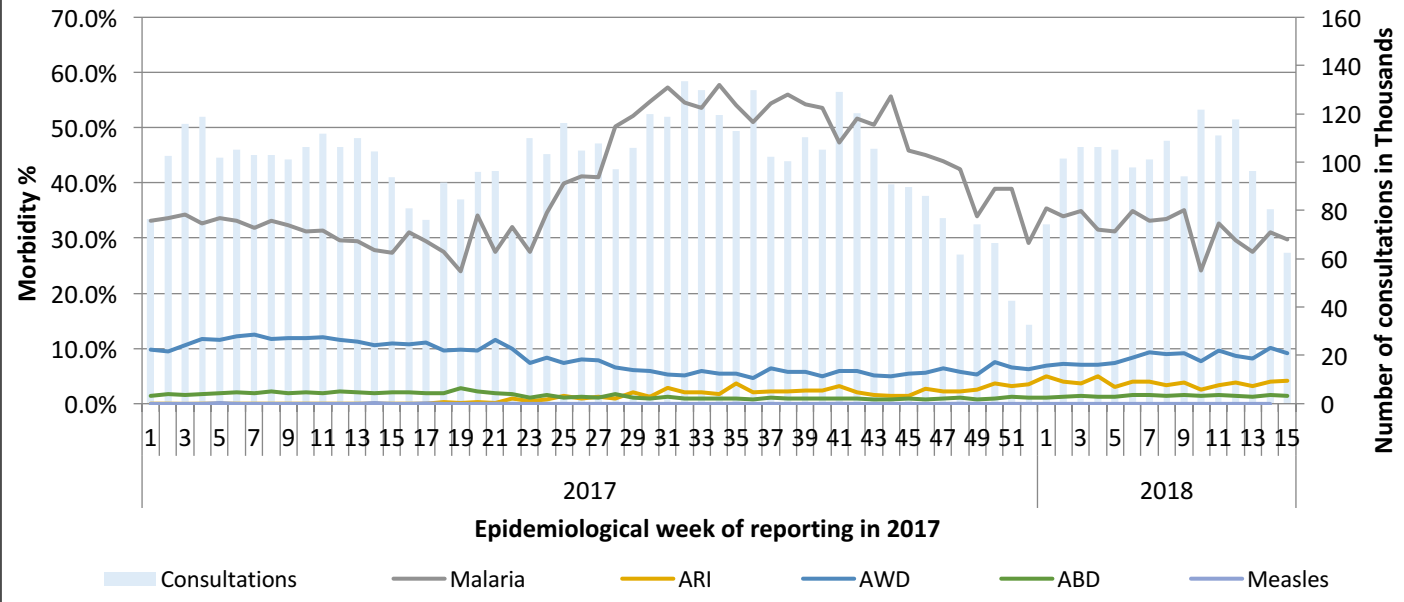
Figure 2, indicates the top causes of morbidity in the country, with malaria being the leading cause of morbidity 541,363 (51.8%) followed by ARI, AWD and ABD respectively since week 1 of 2018. refer to the figure above for more information.

Figure 3 | Trend in total consultations and key diseases (W15)



IDSR Proportionate morbidity trends - in relatively stable states

Fig. 1 | IDSR Proportionate morbidity trends, week 1, 2017 to 15, 2018



In the relatively stable states, malaria is the top cause of morbidity accounting for 29.8% of the consultations in week 15 (representing an decrease from 31% in week14).

Fig. 2 | IDP Proportionate morbidity trends, week 01, 2017, to week 15, 2018

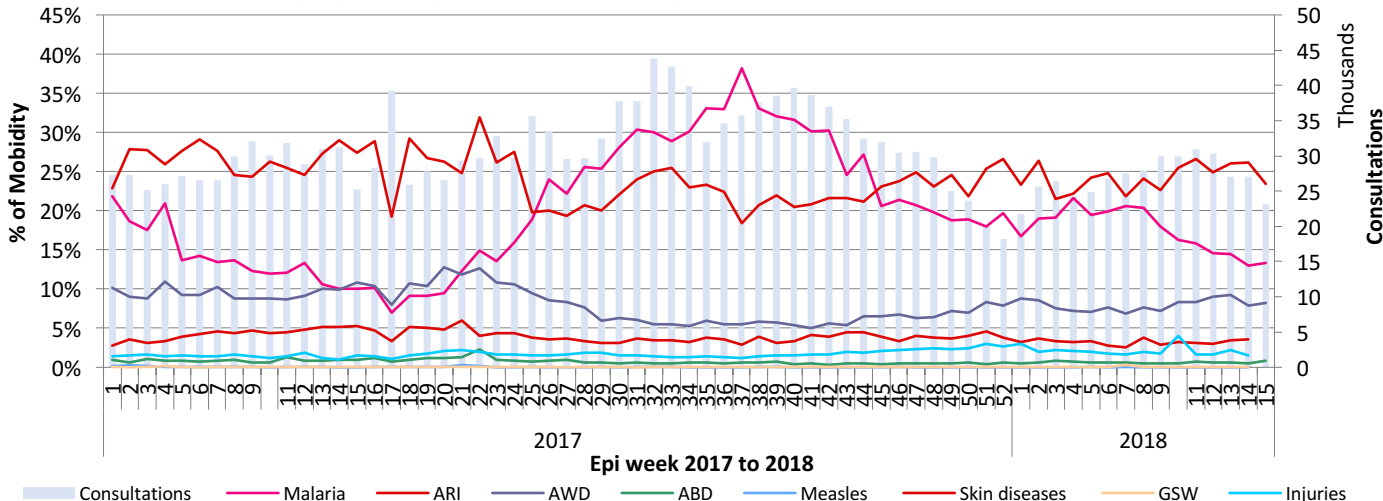
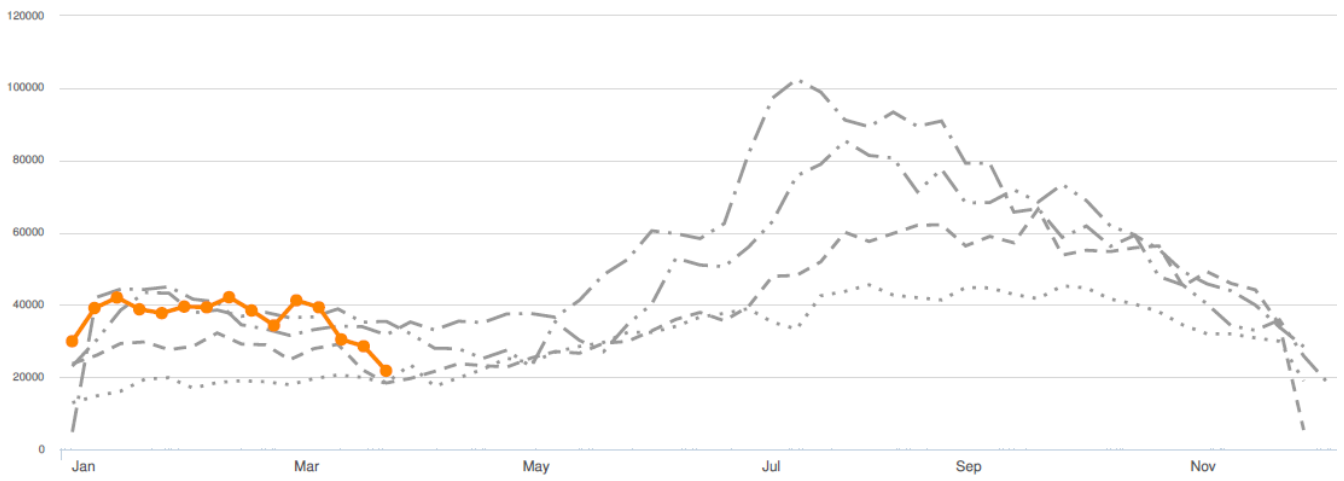


Figure 4a | Trend in number of cases over time (South Sudan)



Graph legend

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

Key malaria indicators (2018)

541,363 Cases
74 Deaths
36 Alerts

Figure 4b | % morbidity



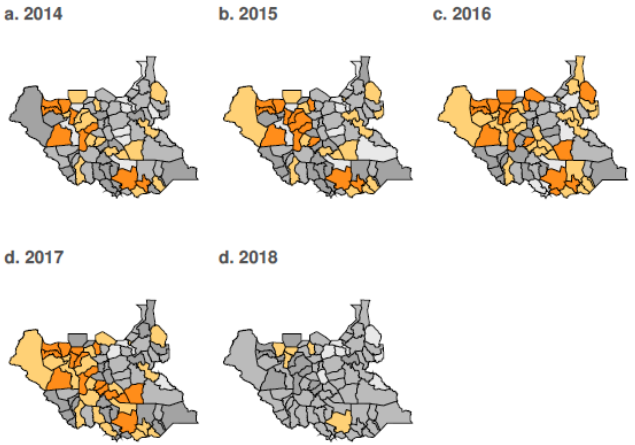
Figure 4c | Age breakdown



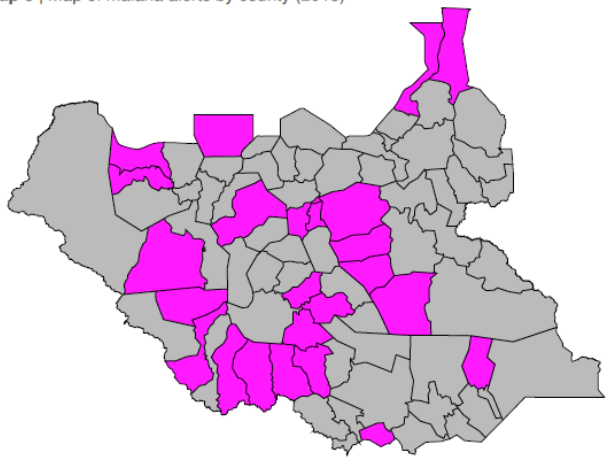
Malaria is the top course of Morbidity in the country, a total of 541,363 cases with 74 deaths registered since week 1 of 2018. malaria trend for week 15 of 2018 is below 2016 and 2017 as shown in the figure 4a, above.

Malaria | Maps and Alert Management

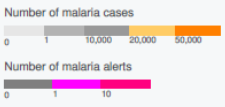
Map 2 | Map of malaria cases by county (2018)



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

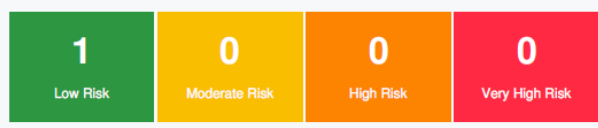


Map legend



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

Risk Assessment

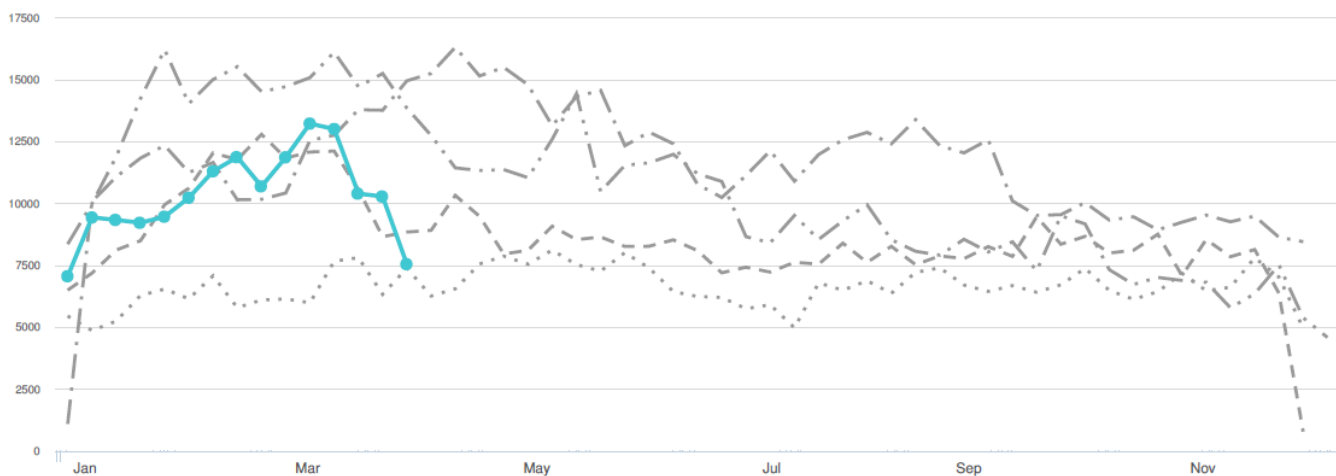


36 Alerts
22 Verified

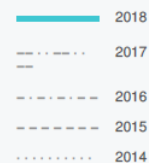
Since the beginning of the year, a total of 36 malaria alerts have been triggered, 22 of those were verified. The Maps above indicate the location reporting malaria alerts from 2014, 2015, 2016, 2017, and 2018.

Acute Watery Diarrhoea | Trends over time

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



Graph legend



Key AWD indicators (2018)

155,034 Cases **9** Deaths **53** Alerts

Figure 5b | % morbidity

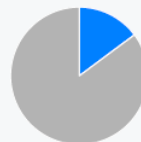


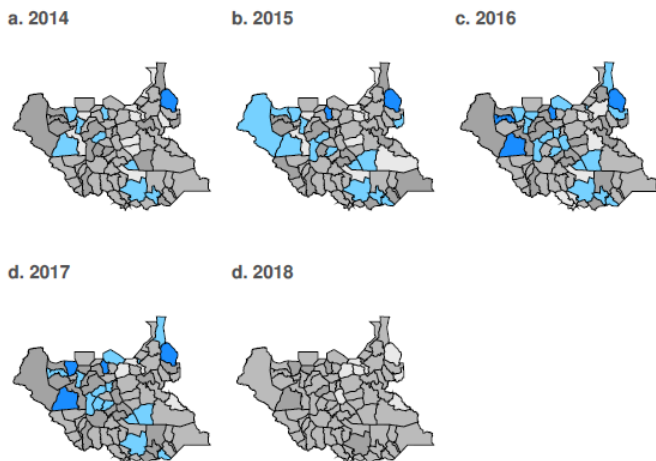
Figure 5c | Age breakdown



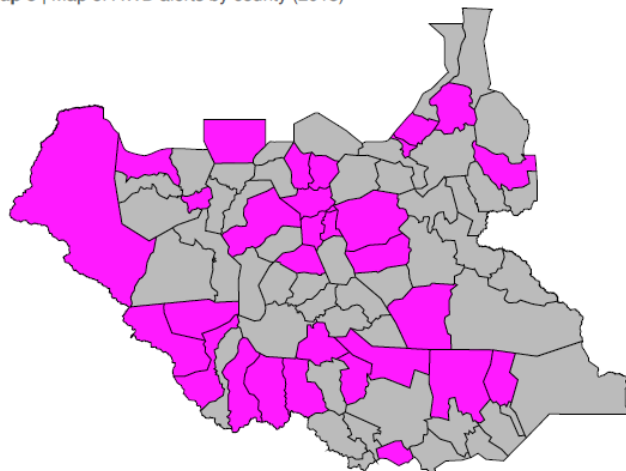
AWD is one of the top causes of morbidity in the country with 155,034 cases reported since week 1 of 2018 including 9 deaths. AWD trend for 2018 is below 2015, 2016, and 2017 as shown in figure 5a, above.

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



53 Alerts **31** Verified

Risk Assessment



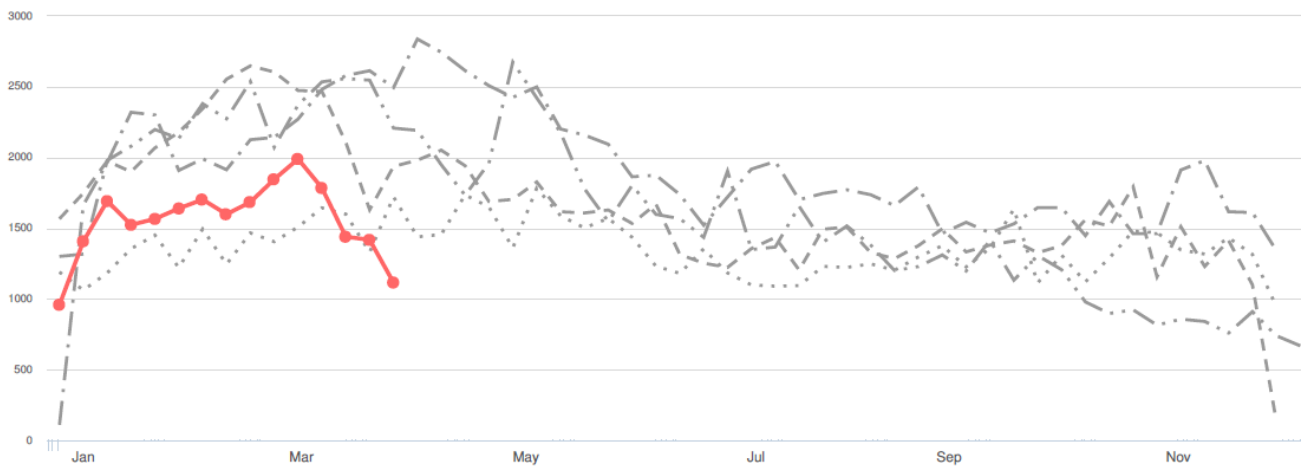
Alert threshold

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

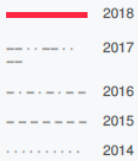
The number of AWD alerts triggered since week 1 of 2018 is 53, out of which 31 were verified. Maps above highlight the areas reporting AWD alerts from 2014 to 2018.

Acute Bloody Diarrhoea | Trends over time

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



Graph legend



Key bloody diarrhoea indicators (2018)

23,341

Cases

5

Deaths

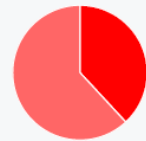
67

Alerts

Figure 6b | % morbidity



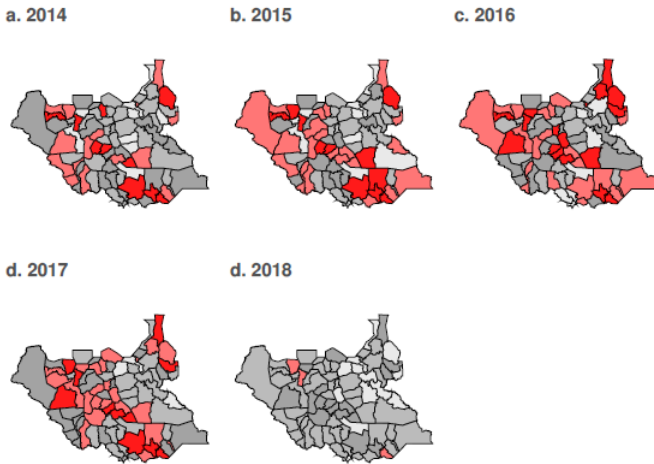
Figure 6c | Age breakdown



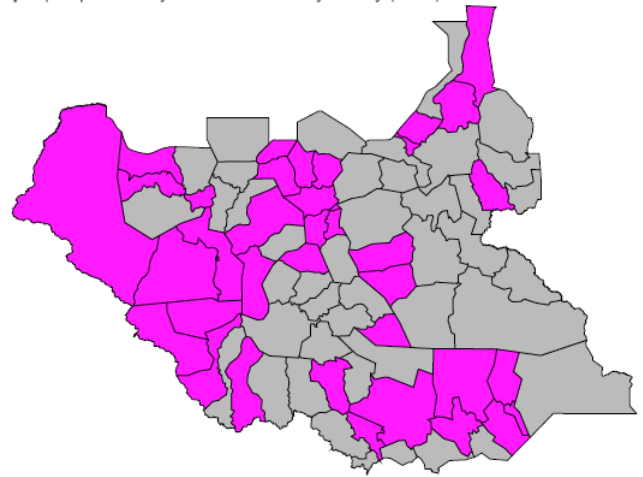
Since week 1 of 2018, a total of 23,341 cases of ABD have been reported country wide including 5 death. ABD trend for 2018 is below 2014, 2015, 2016, and 2017 respectively. Refer to figure 6a, above.

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 alerts



Alert threshold

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

67

Alerts

33

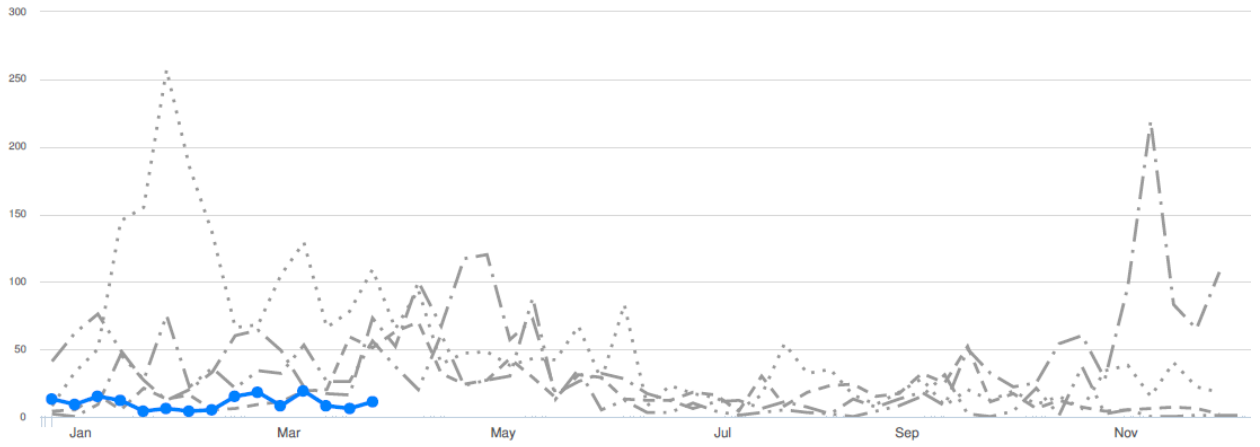
Verified

Risk Assessment



Total of 67 alerts were generated since week 1 of 2018, of which 33 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)



Graph legend

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

Key measles indicators (2018)

153 Cases
1 Deaths
49 Alerts

Figure 7b | % morbidity



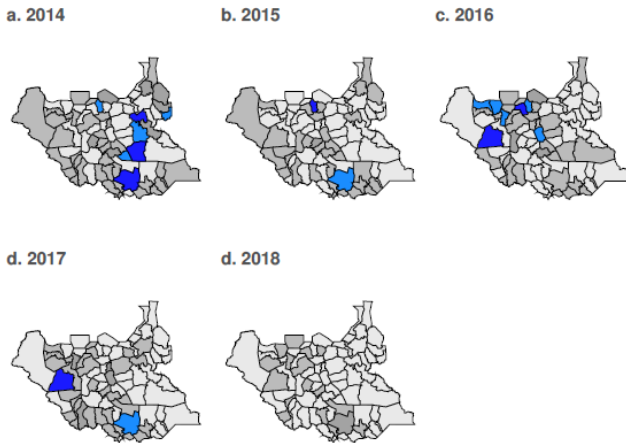
Figure 7c | Age breakdown



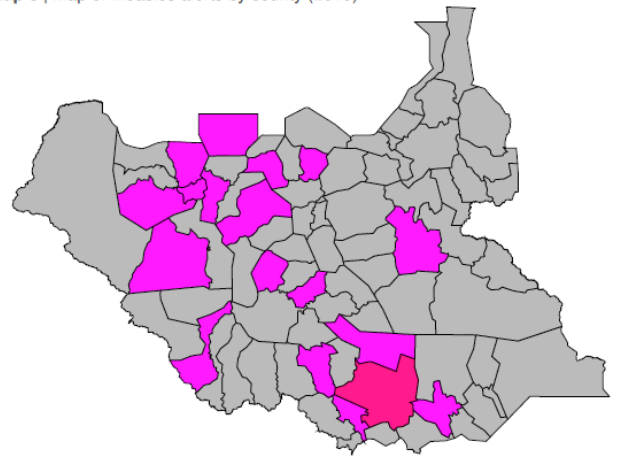
Since the beginning of 2018, at least 153 suspect measles cases including 1 death (CFR 0.8%) have been reported. Of these, 84 suspect cases have undergone measles case-based laboratory-backed investigation with 68 samples collected out of which 14 measles IgM positive cases; 14 clinically confirmed cases; 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)



Map legend



49 Alerts
35 Verified

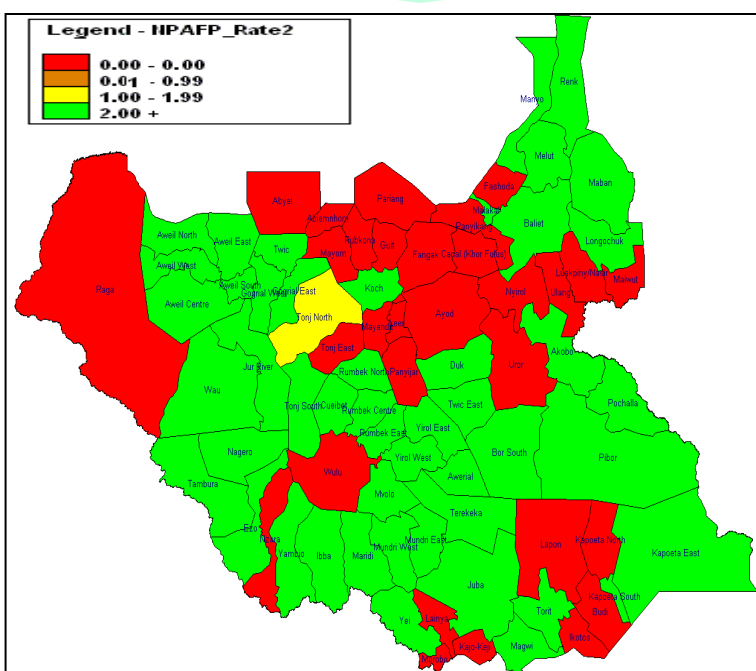
Risk Assessment



Alert threshold

1 case.
 Source: IDSR

Since week 1 of 2018, 49 alerts of measles were triggered and 35 of those have been verified at county level. Maps of areas raising alerts from 2014 to 2018 are shown above.



In week 15, 2018, Seventeen (17) new AFP cases were reported from CES, Jonglei, Lakes, Northern Bahr el Ghazal, Upper Nile, Northern Bahr el Ghazal, Warrap, and Western Equatoria hubs. This brings the cumulative total for 2018 to 102 AFP cases.

The annualized non-Polio AFP (NPAFP) rate (cases per 100,000 population children 0-14 years) in 2018 is 4.30 per 100,000 population of children 0-14 years (target ≥ 2 per 100,000 children 0-14 years).

Stool adequacy was 89% in 2018, a rate that is higher than the target of $\geq 80\%$.

Environmental surveillance ongoing since May 2017; with 23 samples testing positive for non-polio enterovirus (NPEV) in 2017 and seven NPEV positive sample in 2018.

Source: South Sudan Weekly AFP Bulletin

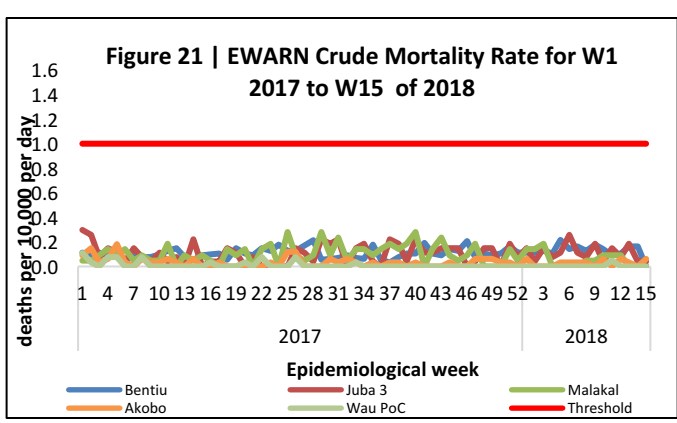
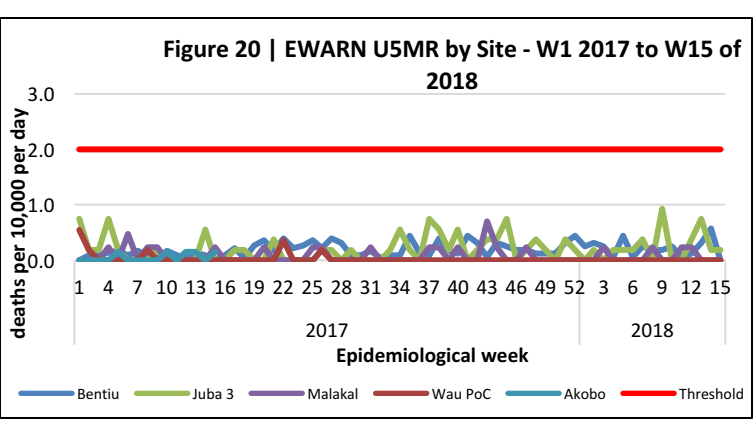
Mortality in the IDPs

Table 6 | Proportional mortality by cause of death in IDPs W15 2018

Cause of Death by IDP site	Akobo		Juba 3	Total deaths
	<5yrs	≥ 5 yrs	<5yrs	
SAM	1			1
Infection Septicemior Syndrome			1	1
stillbirth			1	1
Total deaths	1		1	3

Among the IDPs, mortality data was received from Akobo, and UN House PoC in week 15. (Table 6). **A total of 3** deaths were reported during the week. Bentiu PoC reported is yet to submit 0 (0%) deaths in the week. During the week, 2 (67%) deaths were recorded among children <5 years in (Table 6).

The causes of death during week 15 are shown in Table 6.



The U5MR in all the IDP sites that submitted mortality data in week 15 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 15 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 W15, 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	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	22	45
Malakal		1		2	1			1								2	11	18
Akobo			1		2	1			1			2		1			5	13
Wau PoC						1											0	1
Grand Total	5	3	3	4	4	12	3	15	7	1	5	16	8	2	14	16	112	230
Proportionate mortality [%]	2%	1%	1%	2%	2%	5%	1%	7%	3%	0%	2%	7%	3%	1%	6%	7%	49%	100%

- A total of 230 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

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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>

