

# South Sudan

## Integrated Disease Surveillance and Response (IDSR)

Annexes W35 2018 (Aug 27 – Sep 02)



**World Health  
Organization**  
South Sudan



Ministry of Health  
Republic of South Sudan

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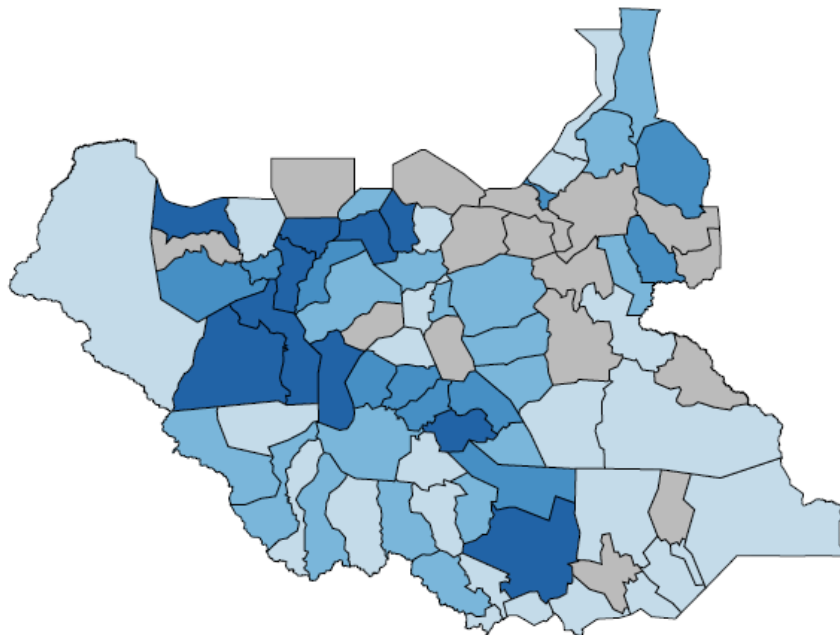
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## Sources of data

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 (W35 2018)

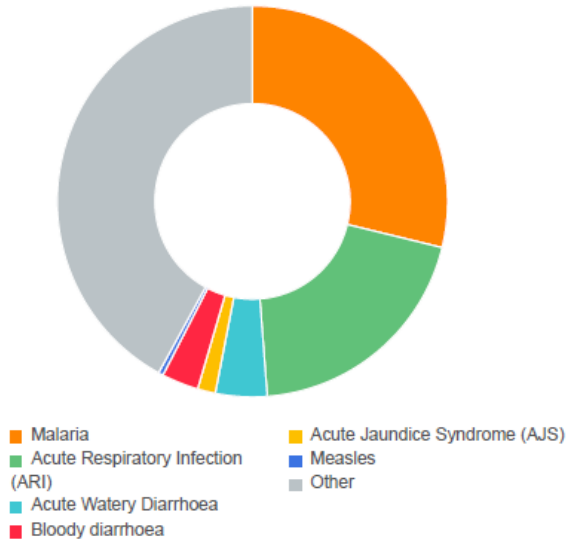


Hub	W35	2018
Aweil	13,936	453,774
Bentiu	16,509	549,218
Bor	5,243	382,601
Juba	15,059	417,602
Kwajok	25,566	898,794
Malakal	17,026	538,303
Rumbek	24,369	624,366
Torit	3,599	212,390
Wau	15,364	319,361
Yambio	10,045	407,465
South Sudan	146,716	4,803,874

The total consultation in the country since week 1 of 2018 is 4,803,874 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)

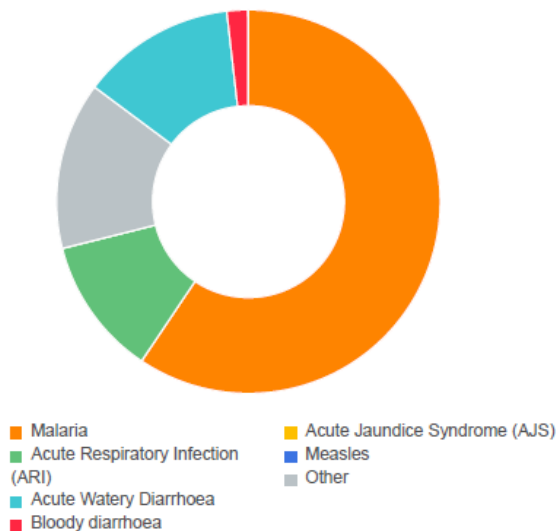


Syndrome	W35		2018	
	# deaths	% mortality	# deaths	% mortality
Malaria	16	45.7%	216	28.8%
ARI	0	0.0%	150	20.0%
AWD	10	28.6%	32	4.3%
Bloody diarrhoea	0	0.0%	23	3.1%
AJS	9	25.7%	11	1.5%
Measles	0	0.0%	3	0.4%
Other	0	0.0%	315	42.0%
<b>Total deaths</b>	<b>35</b>	<b>100%</b>	<b>750</b>	<b>100%</b>

Figure 1, above shows the proportional mortality for 2018, with malaria being the main cause of mortality accounting for 28.8% of the deaths since week 1 of 2018, followed by bloody diarrhoea, and acute watery diarrhoea.

## Proportional morbidity

Figure 2 | Proportional morbidity (2018)

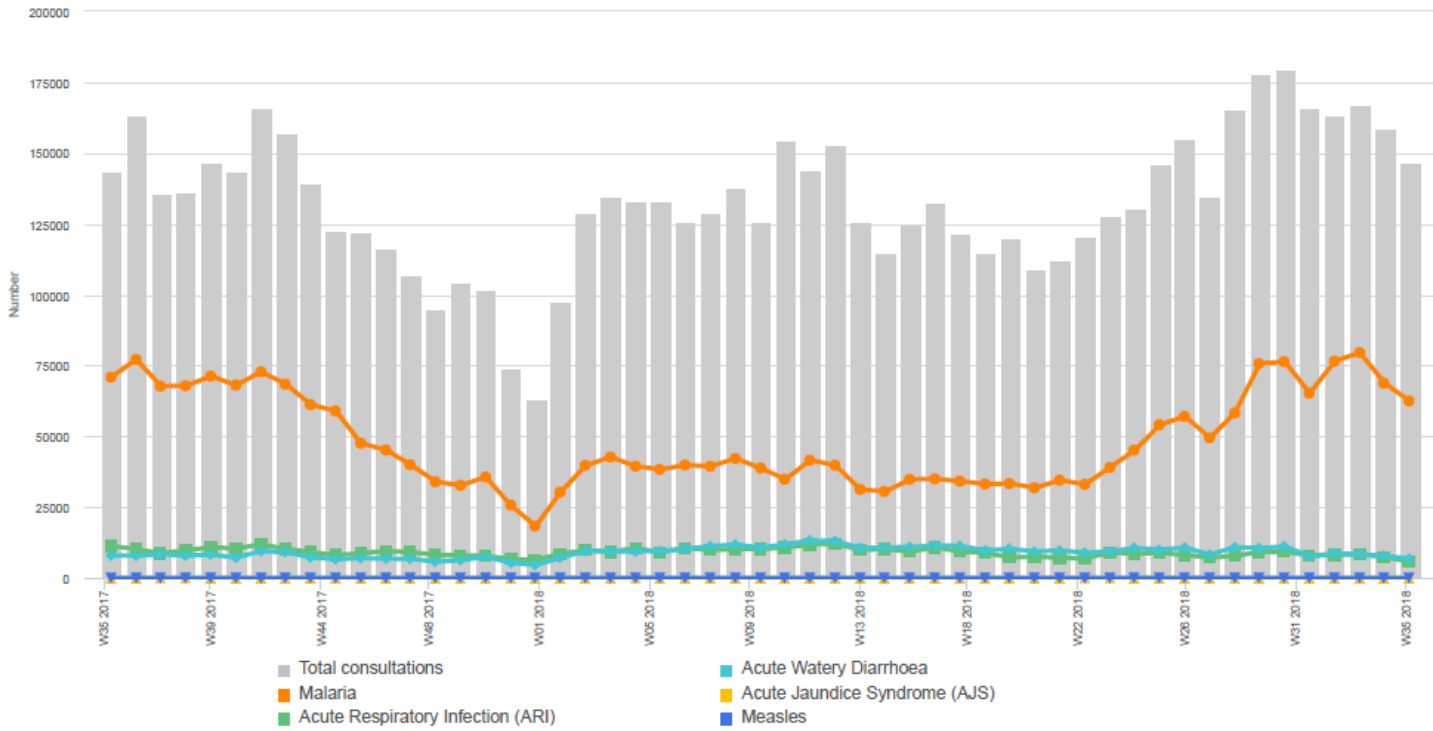


Syndrome	W35		2018	
	# cases	% morbidity	# cases	% morbidity
Malaria	62,539	72.6%	1,607,880	59.4%
ARI	5,735	6.7%	315,975	11.7%
AWD	6,767	7.9%	351,818	13.0%
Bloody diarrhoea	916	1.1%	48,665	1.8%
AJS	0	0.0%	195	0.0%
Measles	4	0.0%	395	0.0%
Other	10,226	11.9%	381,743	14.1%
<b>Total cases</b>	<b>86,187</b>	<b>100%</b>	<b>2,706,671</b>	<b>100%</b>

Figure 2, indicates the top causes of morbidity in the country, with malaria being the leading cause of morbidity 1,607,880 (59.4%) followed by ARI, AWD and ABD respectively since week 1 of 2018. refer to the figure above for more information.

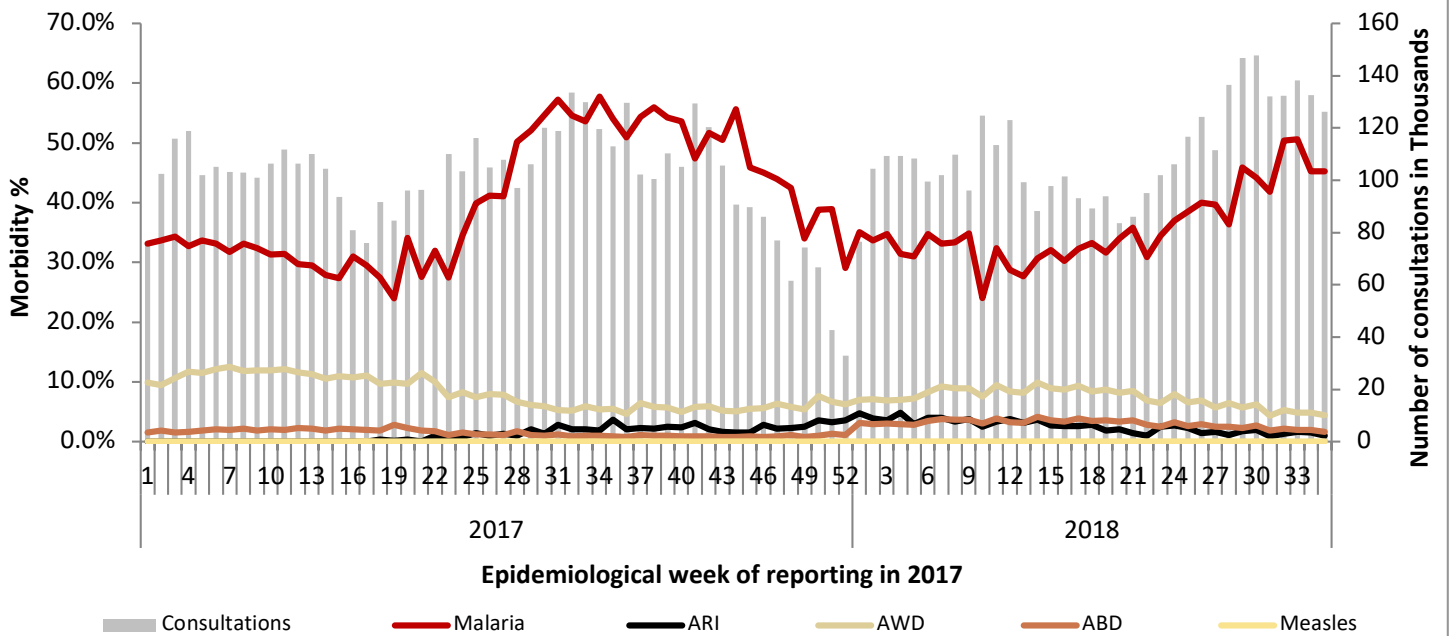
## Trend in consultations and key diseases

Figure 3 | Trend in total consultations and key diseases (W35)



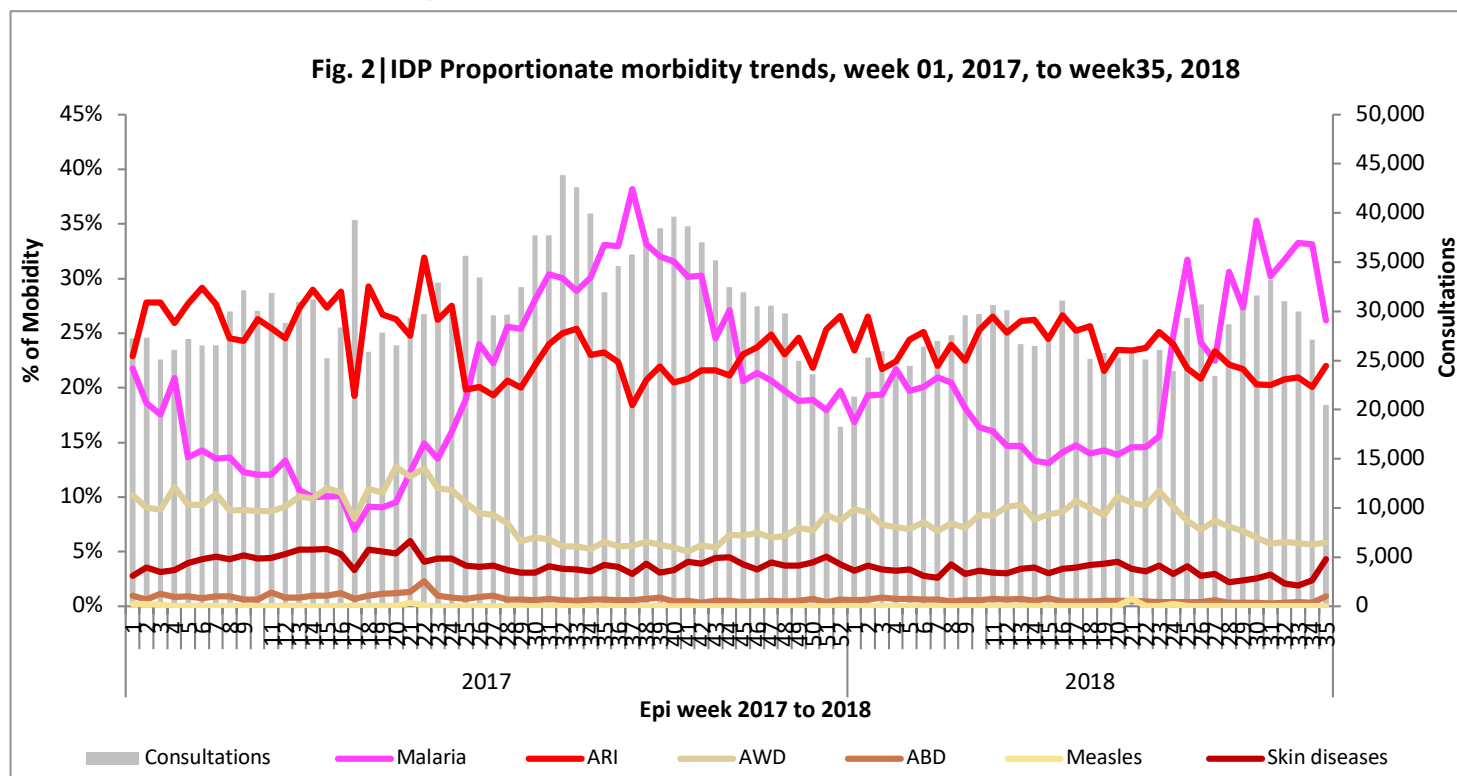
## IDSR Proportionate morbidity trends - in relatively stable states

Fig. 1 | IDSR Proportionate morbidity trends, week 1, 2017 to 35, 2018



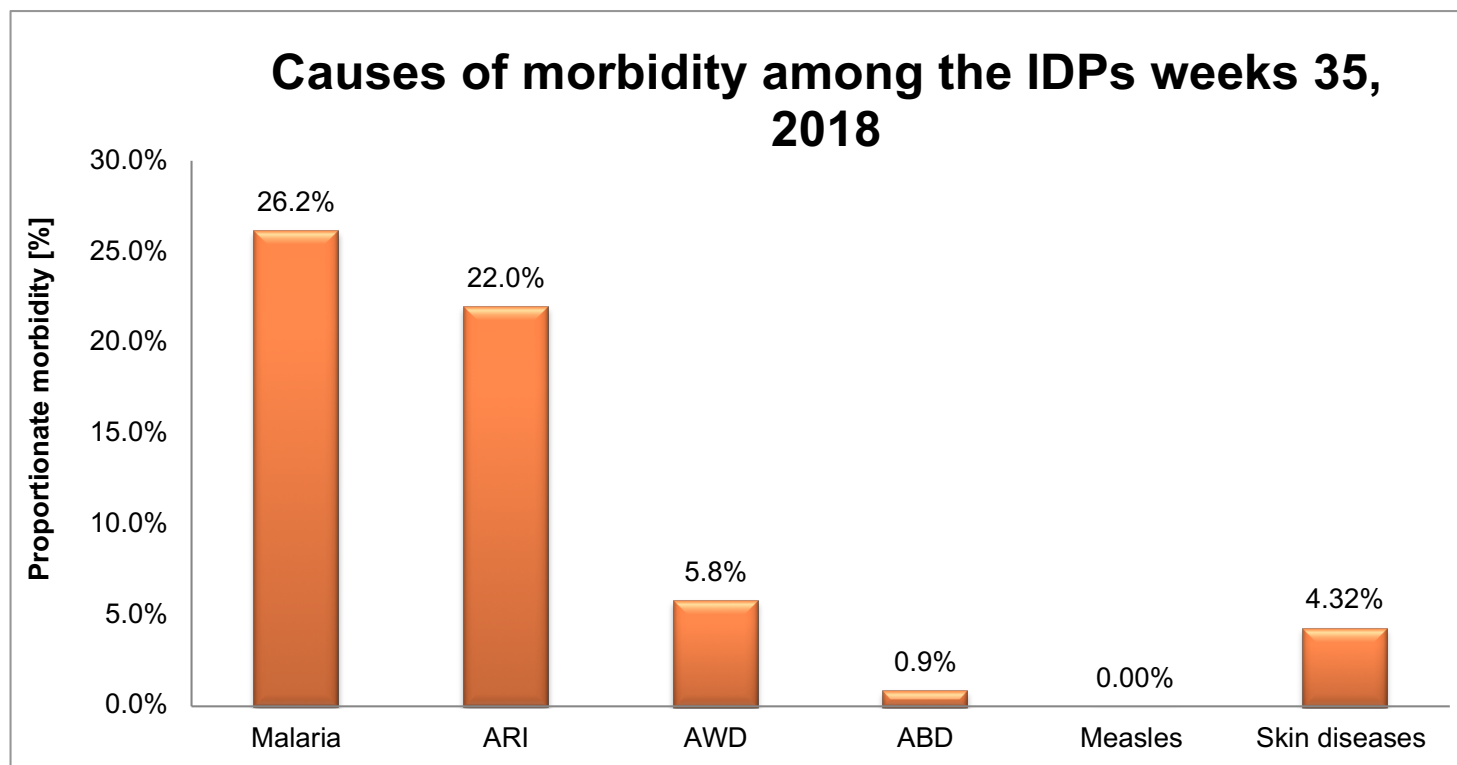
In the relatively stable states, malaria is the top cause of morbidity accounting for 45.3% of the consultations in week 35 (representing a constant trend of 45.3% as week 34).

## IDP Proportionate morbidity trends - in displaced population



Among the IDPs, Malaria and ARI accounted for 26.2% and 22.0% of the consultations in week 35. The other significant causes of morbidity in the IDPs includes AWD, Skin diseases, and Measles.

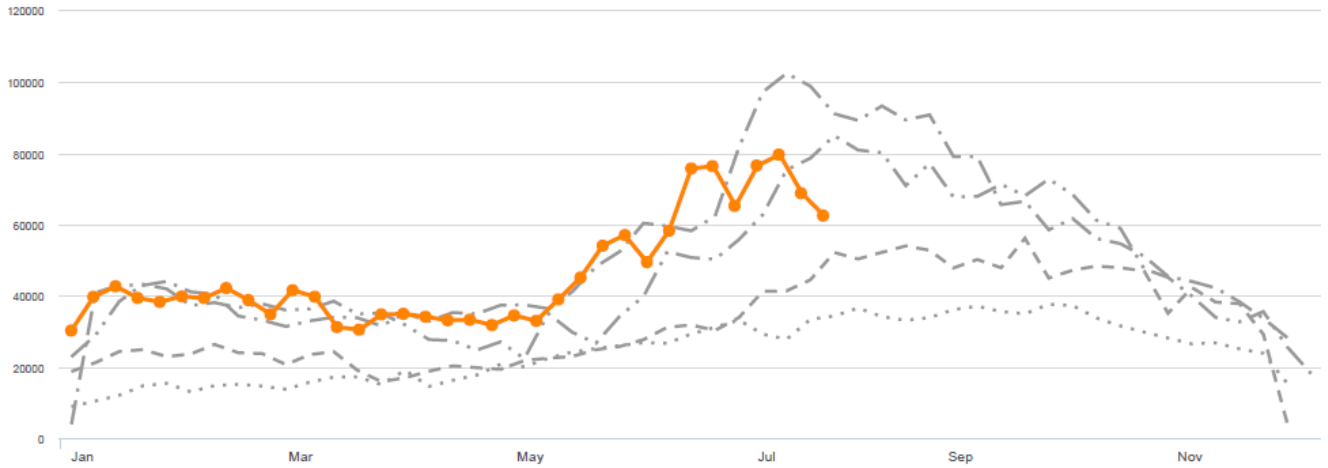
## IDSR Proportionate morbidity trends - in displaced population



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)



**Graph legend**

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

**Key malaria indicators (2018)**

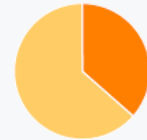
**1,607,880** **216** **104**

Cases Deaths Alerts

**Figure 4b | % morbidity**



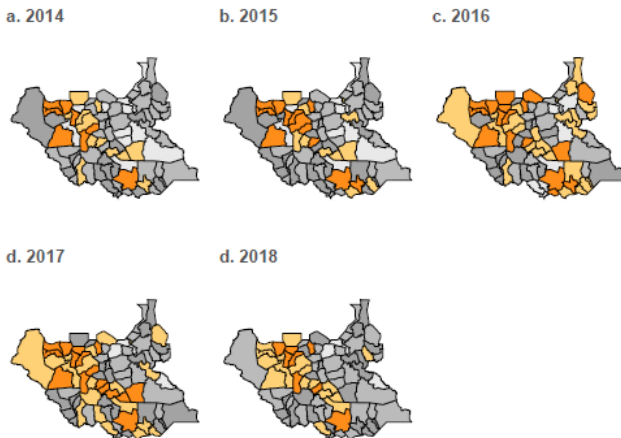
**Figure 4c | Age breakdown**



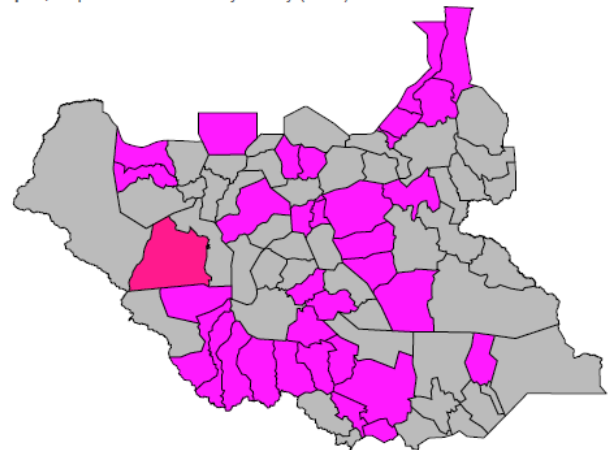
Malaria is the top course of Morbidity in the country, a total of 1,607,880 cases with 216 deaths registered since week 1 of 2018. malaria trend for week 35 of 2018 is above 2014, and 2015 as shown in the figure 4a, above.

# Malaria | Maps and Alert Management

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

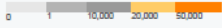


Map 3 | Map of malaria alerts by county (2018)

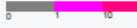


**Map legend**

Number of malaria cases



Number of malaria alerts



**Alert threshold**

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

**104** **68**

Alerts Verified

**Risk Assessment**

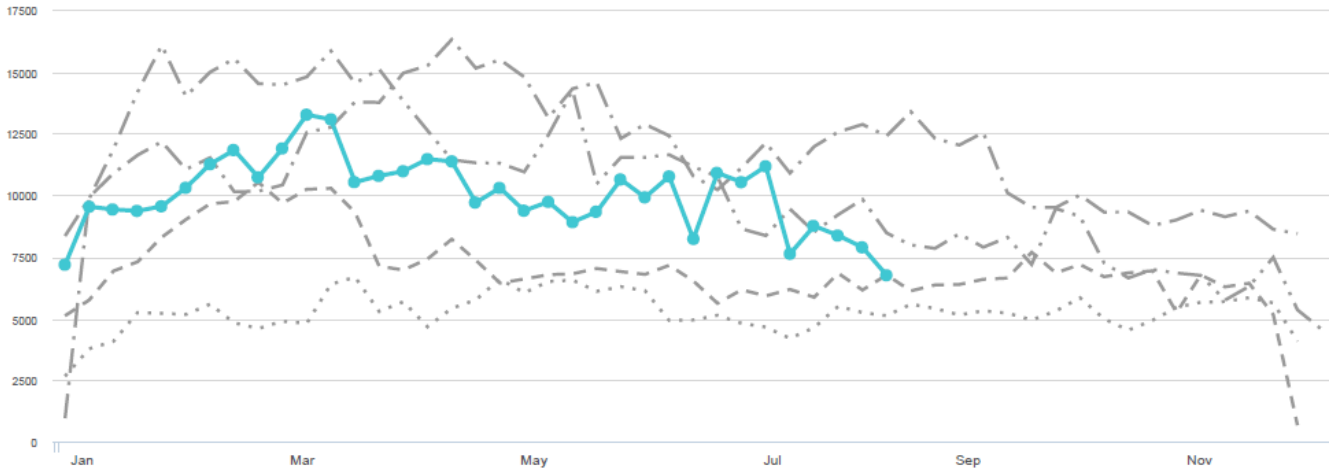


Since the beginning of the year, a total of 104 malaria alerts have been triggered, 68 of those were verified. The Maps above indicate the location reporting malaria alerts from 2014, 2015, 2016, 2017, and 2018.



# Acute Watery Diarrhoea | Trends over time

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



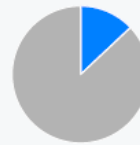
**Graph legend**

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

**Key AWD indicators (2018)**

**351,818**   **32**   **101**  
 Cases   Deaths   Alerts

**Figure 5b | % morbidity**



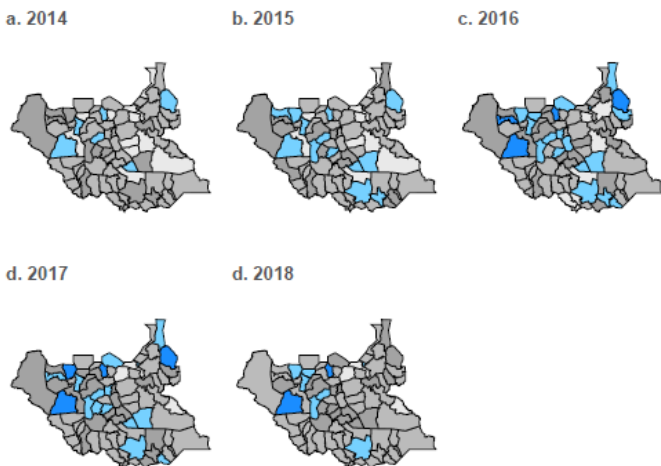
**Figure 5c | Age breakdown**



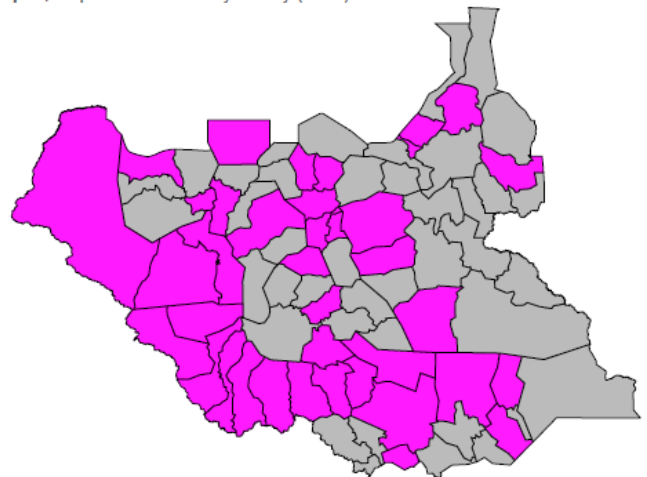
AWD is one of the top causes of morbidity in the country with 351,818 cases reported since week 1 of 2018 including 32 deaths. AWD trend for week 34 of 2018, is below 2016 and 2017, as shown in figure 5a, above.

# 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**



**Alert threshold**

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

**101**   **67**  
 Alerts   Verified

**Risk Assessment**

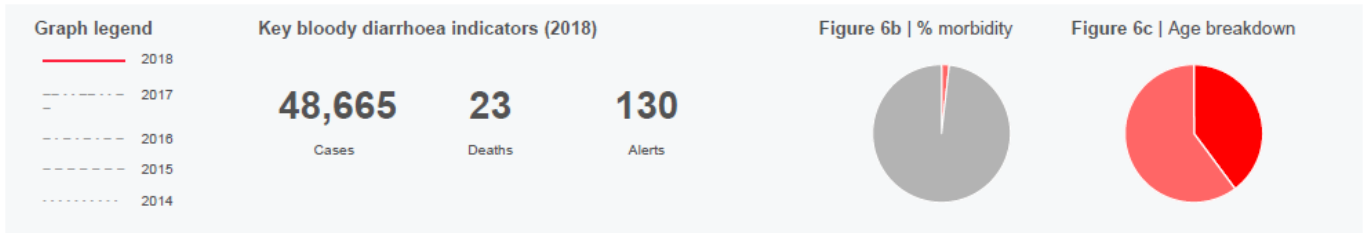
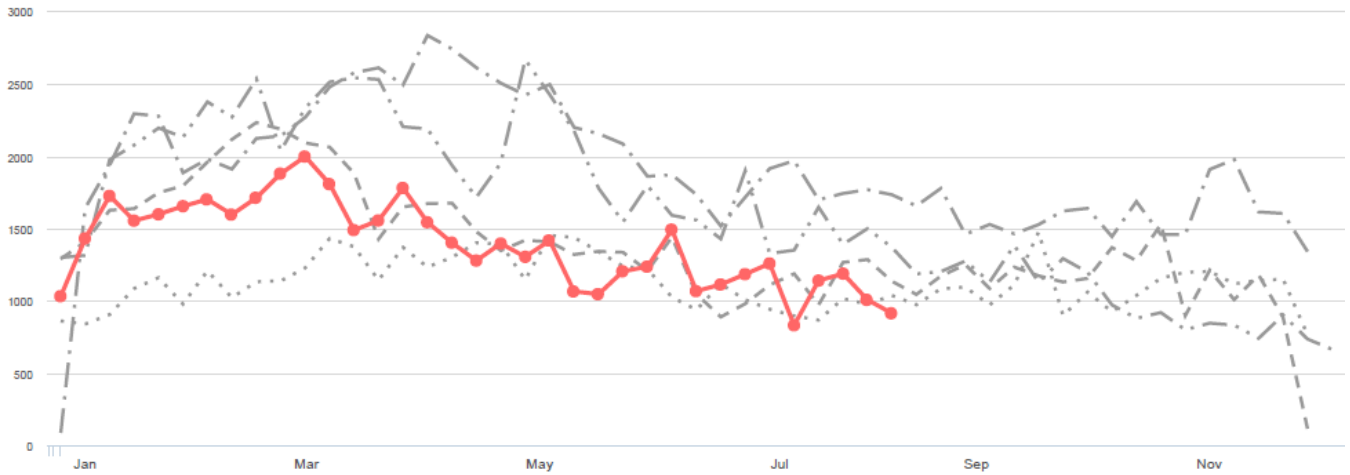


The number of AWD alerts triggered since week 1 of 2018 is 101, out of which 67 were verified. Maps above highlight the areas reporting AWD alerts from 2014 to 2018.



# Acute Bloody Diarrhoea | Trends over time

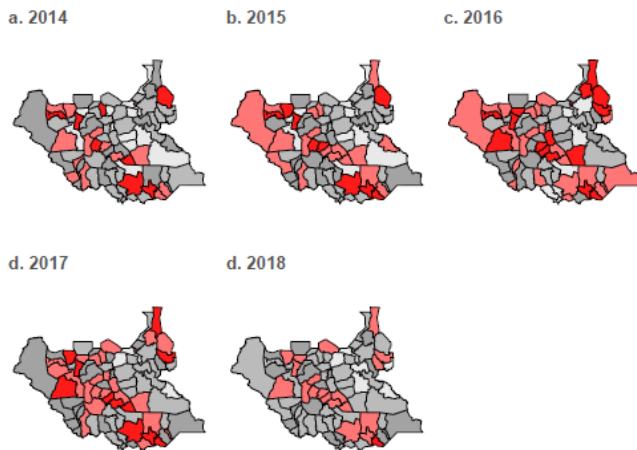
Figure 6a | Trend in bloody diarrhoea cases over time (South Sudan)



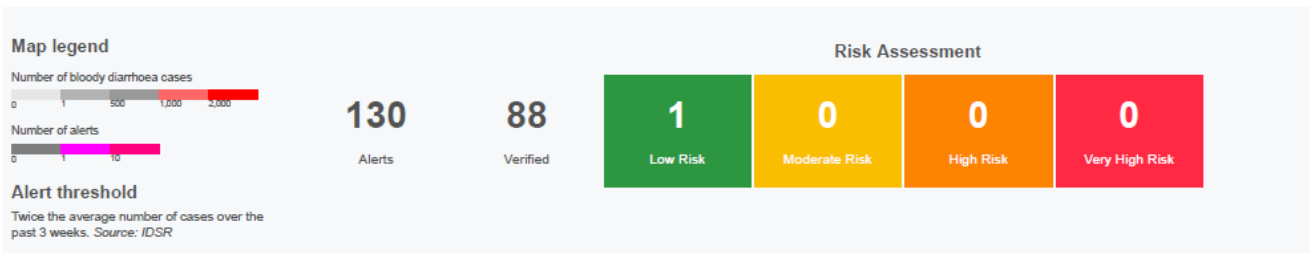
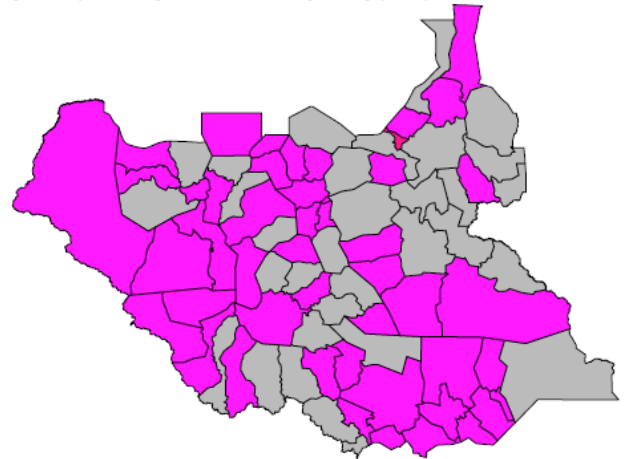
Since week 1 of 2018, a total of 48,665 cases of ABD have been reported country wide including 23 death. ABD trend for 2018 is below 2014, 2015, 2016, and 2017 respectively. Refer to figure 6a, above.

# 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)

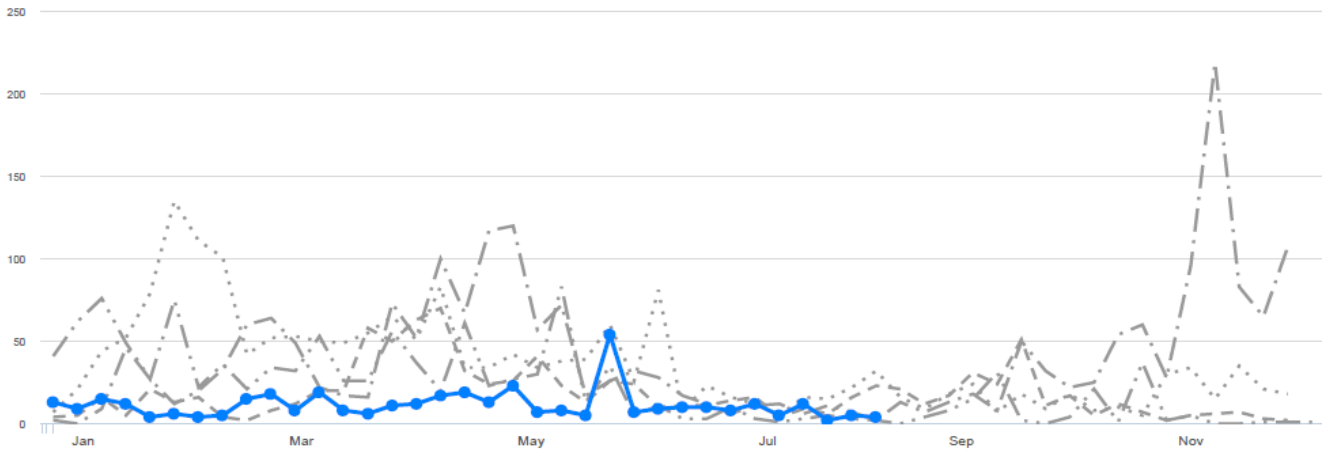


Total of 130 alerts were generated since week 1 of 2018, of which 88 were verified by the county surveillance team. Maps indicating areas triggering alerts since 2014 to 2018 are shown above.

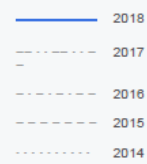


# Measles | Trends over time

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



**Graph legend**



**Key measles indicators (2018)**

**395** Cases  
**3** Deaths  
**106** Alerts

**Figure 7b | % morbidity**



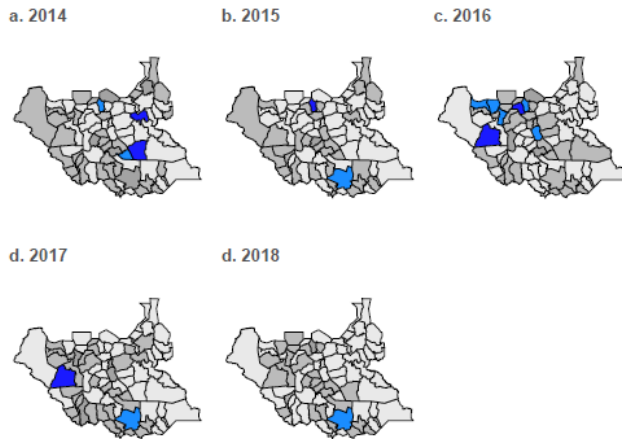
**Figure 7c | Age breakdown**



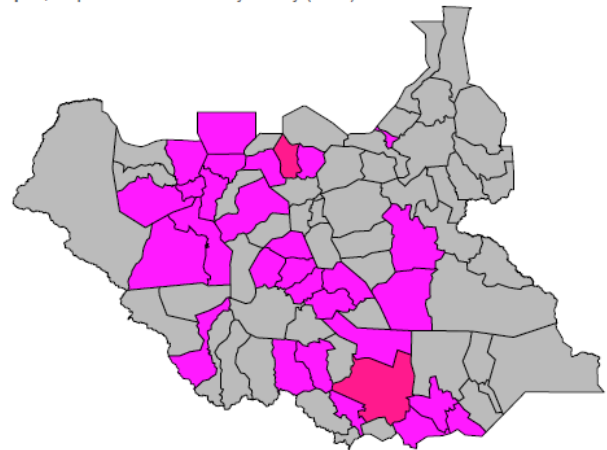
Since the beginning of 2018, at least 395 suspect measles cases including 3 death (CFR 0.76%) have been reported. Of these, 292 suspect cases have undergone measles case-based laboratory-backed investigation with 245 samples collected out of which 26 measles IgM positive cases; 63 clinically confirmed cases; and 34 cases confirmed by epidemiological linkage.

# Measles | Maps and Alert Management

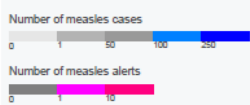
Map 7 | Map of measles cases by county (2018)



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



**Map legend**



**Alert threshold**

1 case.  
 Source: IDSR

**Risk Assessment**



Since week 1 of 2018, 106 alerts of measles were triggered and 87 of those have been verified at county level. Maps of areas raising alerts from 2014 to 2018 are shown above.

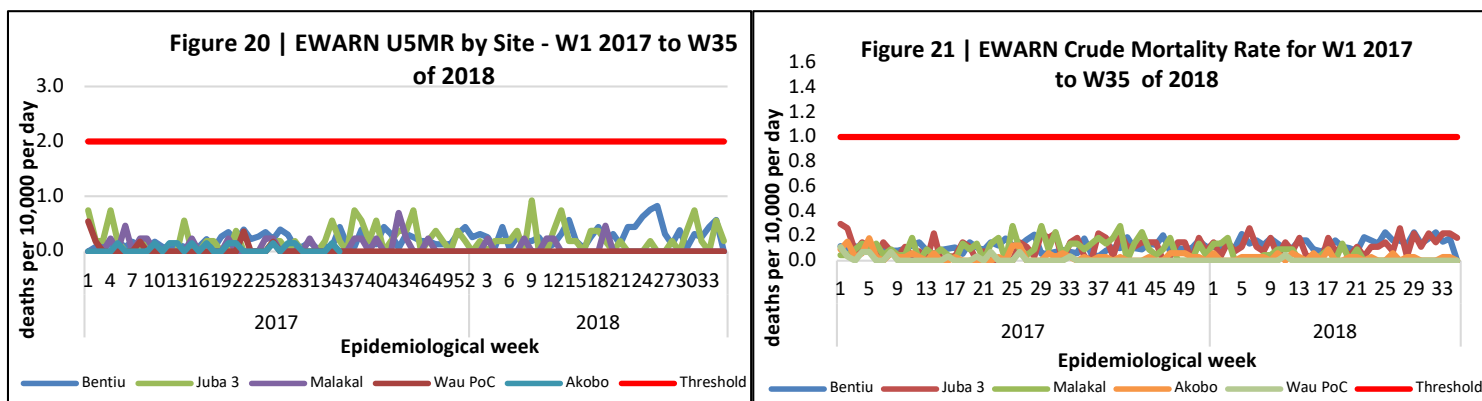
**Table 6 | Proportional mortality by cause of death in IDPs W35 2018**

Cause of Death by IDP site	Juba 3		Total deaths
	<5yrs	≥5yrs	
Unkown	1	3	4
Wasting Sydrom		1	1
<b>Total deaths</b>	1	4	5

Among the IDPs, mortality data was received UN House PoC in week 35. (Table 6). **A total of 05** deaths were reported during the week. Bentiu PoC did not report (0%) in the week. During the week, 1 (20%) deaths were recorded among children <5 years in (Table 6).

The causes of death during week 35 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 35 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 35 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 W35, 2018**

IDP site	acute watery diarrhoea	cancer	GSW	Heart Failure	Kala-Azar	malaria	Meningitis	perinatal death	pneumonia	Rabies	SAM	Sepsis	TB/HIV/AIDS	Trauma	HIV/AIDS	TB	Others	Grand Total
Bentiu	7	1	7	1	2	37	3	26	11	1	17	18	13	1	19	7	219	390
Juba 3	1	1		5		11			5		3		1		6	7	76	116
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
<b>Grand Total</b>	<b>8</b>	<b>3</b>	<b>8</b>	<b>9</b>	<b>5</b>	<b>53</b>	<b>3</b>	<b>27</b>	<b>19</b>	<b>1</b>	<b>22</b>	<b>20</b>	<b>15</b>	<b>2</b>	<b>25</b>	<b>16</b>	<b>322</b>	<b>558</b>
<b>Proportionate mortality [%]</b>	<b>1%</b>	<b>1%</b>	<b>1%</b>	<b>2%</b>	<b>1%</b>	<b>9%</b>	<b>1%</b>	<b>5%</b>	<b>3%</b>	<b>0%</b>	<b>4%</b>	<b>4%</b>	<b>3%</b>	<b>0%</b>	<b>4%</b>	<b>3%</b>	<b>58%</b>	<b>100%</b>

A total of 558 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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## 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>

