

South Sudan

Integrated Disease Surveillance and Response (IDSR)

Annexes W3 2018 (Jan15 - Jan21)



**World Health
Organization**
South Sudan



Ministry of Health
Republic of South Sudan

Access and Utilisation

Slide 2 **Map 1** Map of consultations by county (2018)

Indicator-based surveillance

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Disease trends and maps

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Bloody diarrhoea

Slide 10 **Trend in bloody diarrhoea cases over time**

Slide 11 **Bloody diarrhoea maps and alert management**

Measles

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

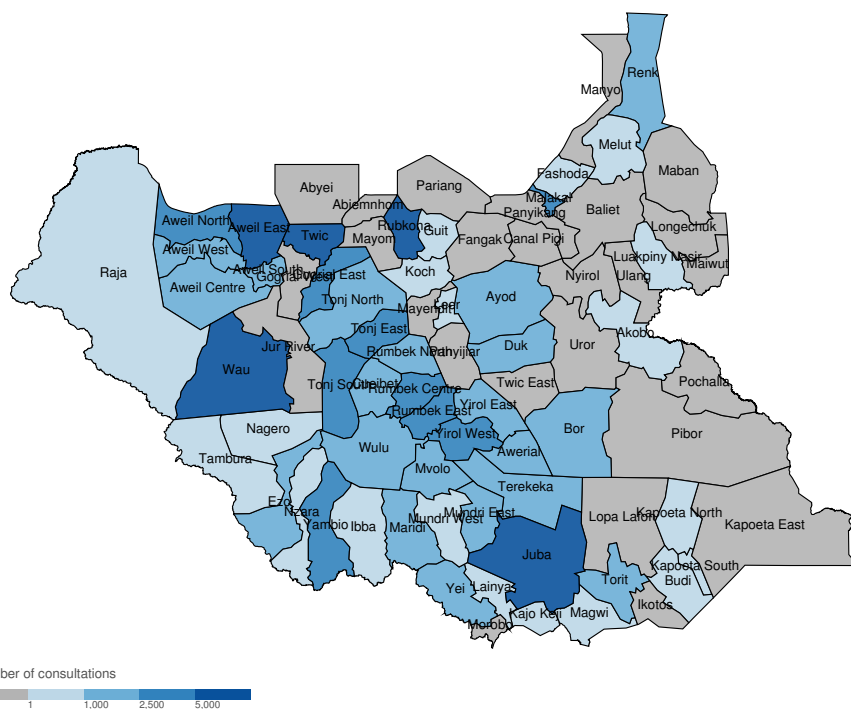
Slide 13 **Measles maps and alert management**

Sources of data

1. Weekly IDSR Reporting Form
2. Weekly EWARS Reporting Form

Access and Utilization | Map of consultations by county

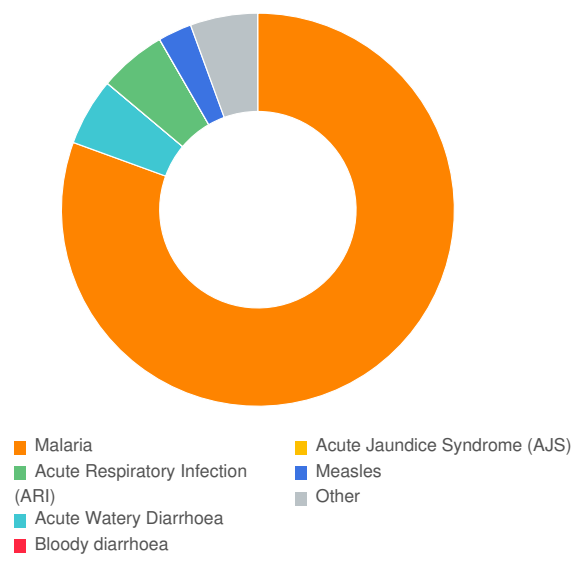
Map 1 | Map of total consultations by county (W3 2018)



Hub	W3	2018
Aweil	19,458	52,428
Bentiu	7,939	25,200
Bor	5,218	28,399
Juba	11,123	29,517
Kwajok	17,071	48,017
Malakal	7,462	21,296
Rumbek	17,236	46,309
Torit	4,110	9,355
Wau	7,447	18,833
Yambio	12,632	
South Sudan	109,696	312,678

Proportional mortality

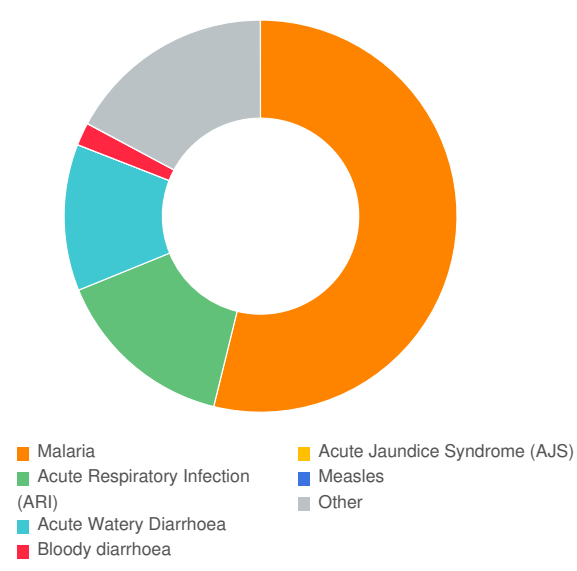
Figure 1 | Proportional mortality (2018)



Syndrome	W3		2018	
	# deaths	% mortality	# deaths	% mortality
Malaria	6	75.0%	29	80.6%
ARI	1	12.5%	2	5.6%
AWD	0	0.0%	2	5.6%
Bloody diarrhoea	0	0.0%	0	0.0%
AJS	0	0.0%	0	0.0%
Measles	0	0.0%	1	2.8%
Other	1	12.5%	2	5.6%
Total deaths	8	100%	36	100%

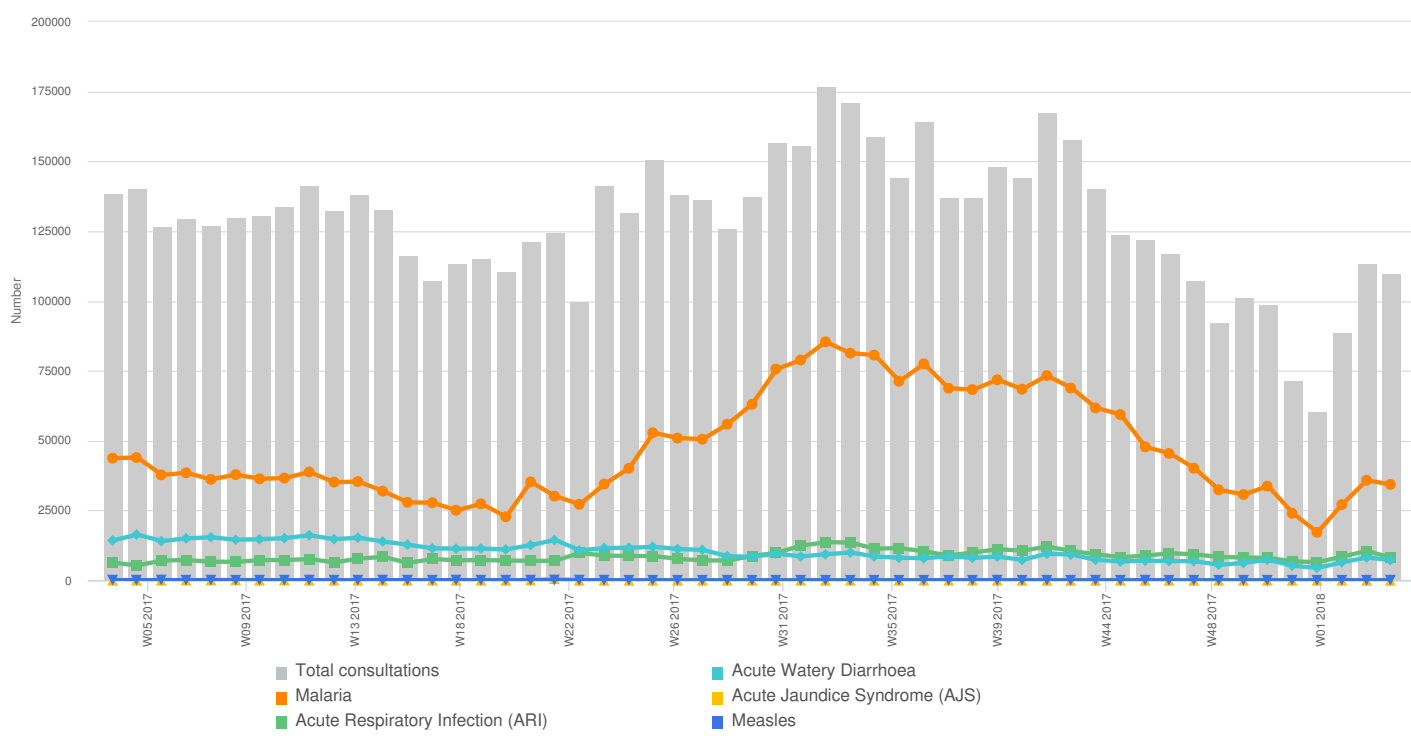
Proportional morbidity

Figure 2 | Proportional morbidity (2018)

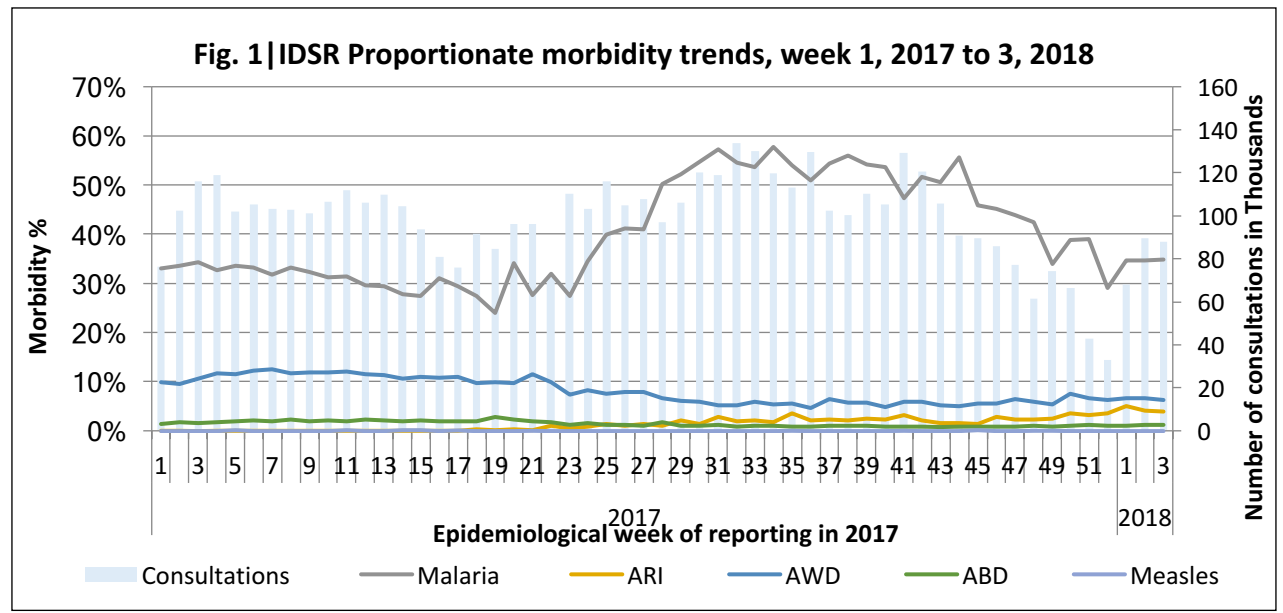


Syndrome	W3		2018	
	# cases	% morbidity	# cases	% morbidity
Malaria	34,334	56.7%	97,220	53.8%
ARI	8,167	13.5%	27,099	15.0%
AWD	7,234	11.9%	21,835	12.1%
Bloody diarrhoea	1,280	2.1%	3,375	1.9%
AJS	0	0.0%	3	0.0%
Measles	15	0.0%	37	0.0%
Other	9,555	15.8%	30,995	17.2%
Total cases	60,585	100%	180,564	100%

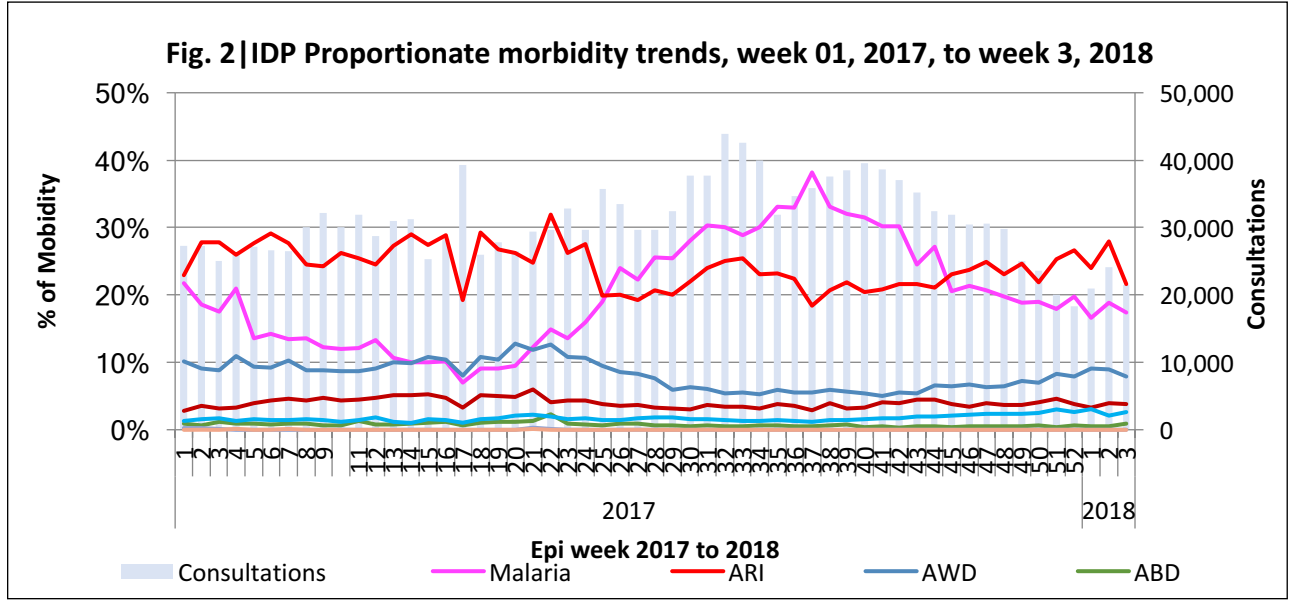
Figure 3 | Trend in total consultations and key diseases (W3)



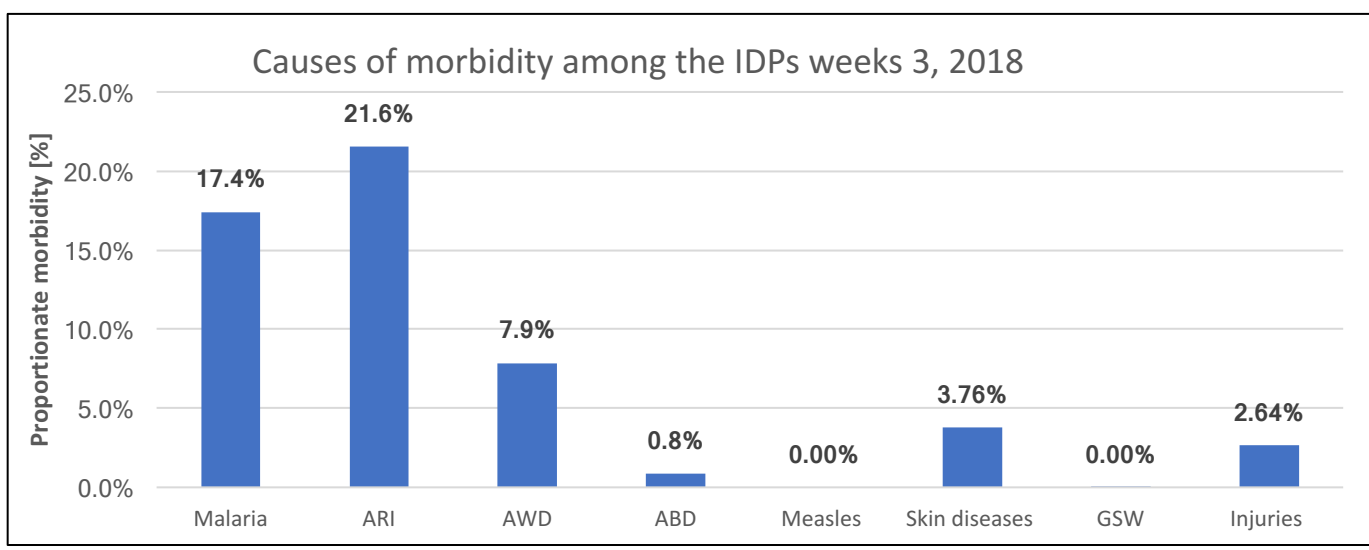
IDSR Proportionate morbidity trends - in relatively stable states



In the relatively stable states, malaria is the top cause of morbidity accounting for 34.8% of the consultations in week 3 (representing a decline from 35.8% in week 1).



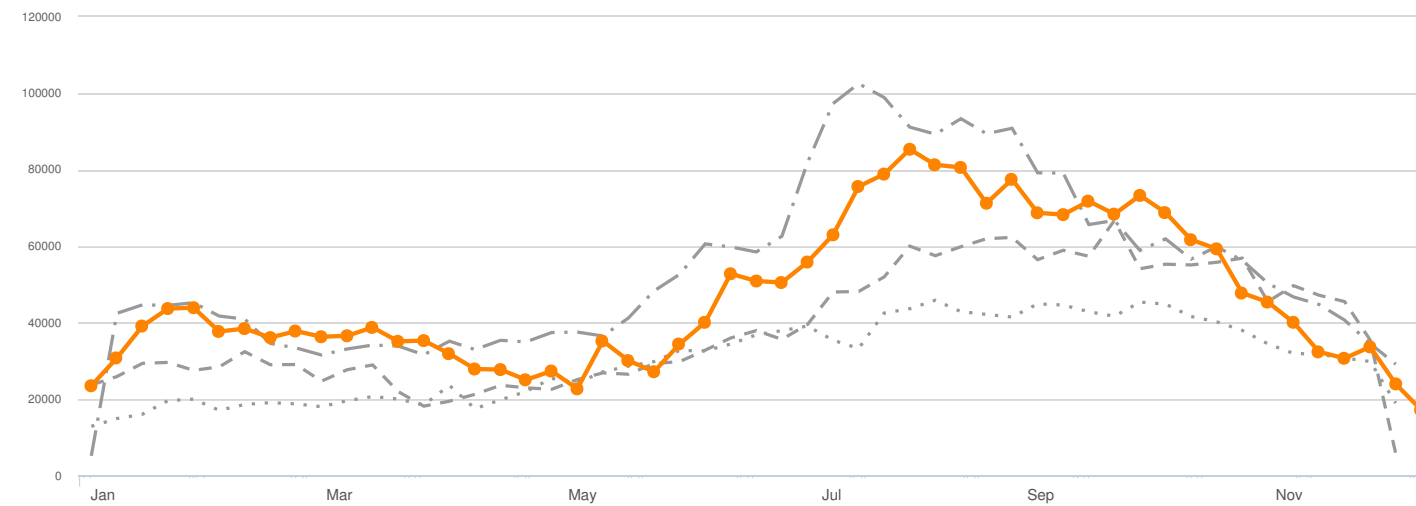
Among the IDPs, ARI and malaria accounted for 21.6% and 17.4% of consultations in week 3. The other significant causes of morbidity in the IDPs include AWD, skin diseases, and injuries.



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

Malaria | Trends over time

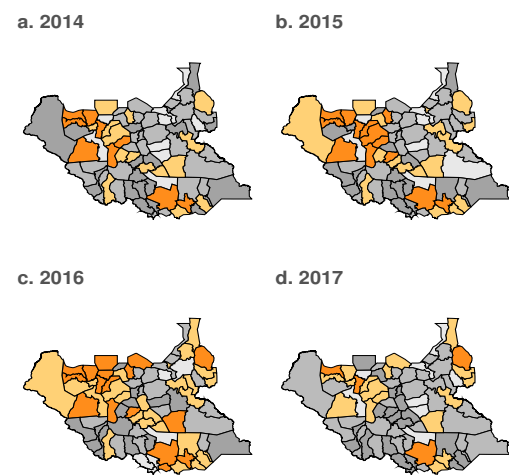
Figure 4a | Trend in number of cases over time (South Sudan)



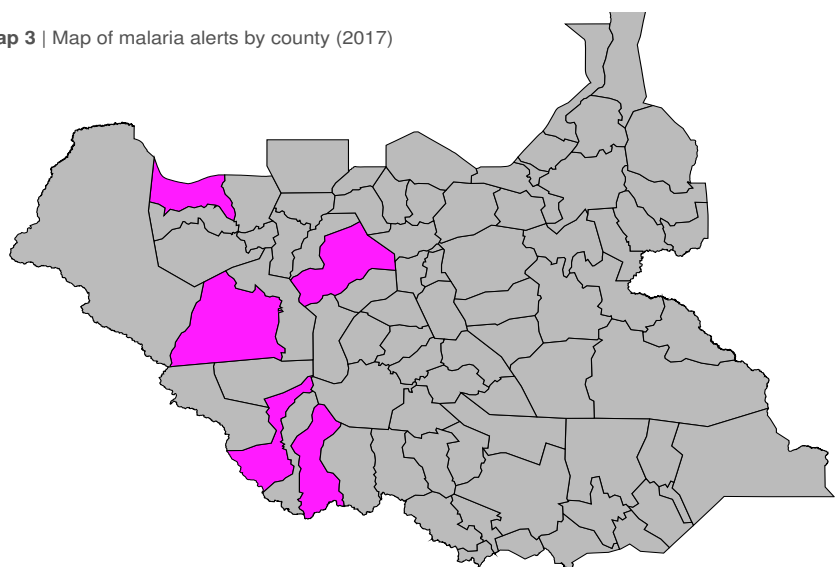
<p>Graph legend</p> <ul style="list-style-type: none"> —●— 2017 - - - - - 2016 - · - · - 2015 ····· 2014 	<p>Key malaria indicators (2018)</p> <p>97,220 Cases</p> <p>29 Deaths</p> <p>7 Alerts</p>	<p>Figure 4b % morbidity</p>	<p>Figure 4c Age breakdown</p>
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Malaria | Maps and Alert Management

Map 2 | Map of malaria cases by county (2017)

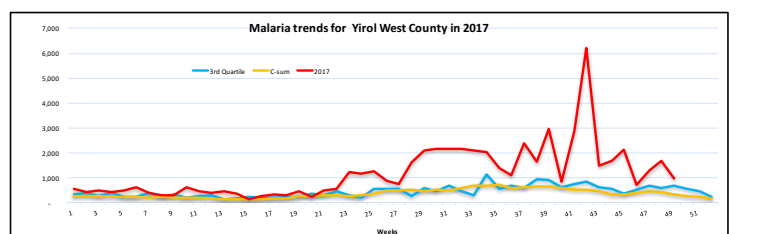
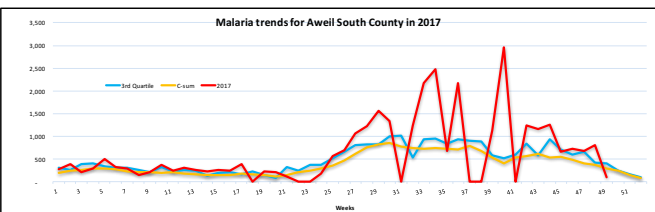
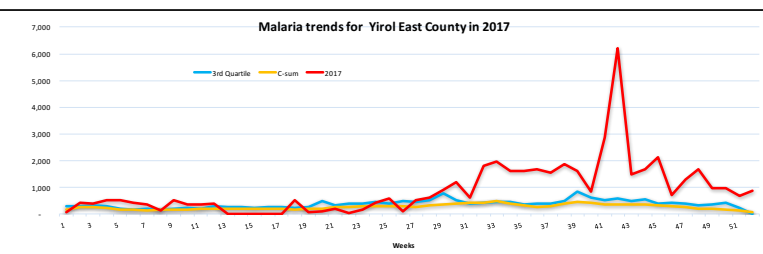
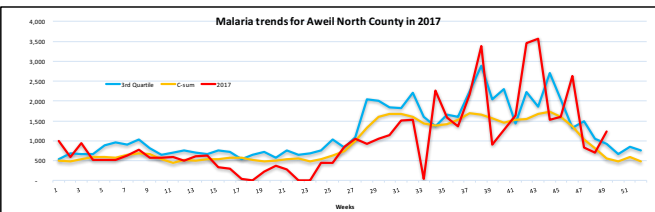
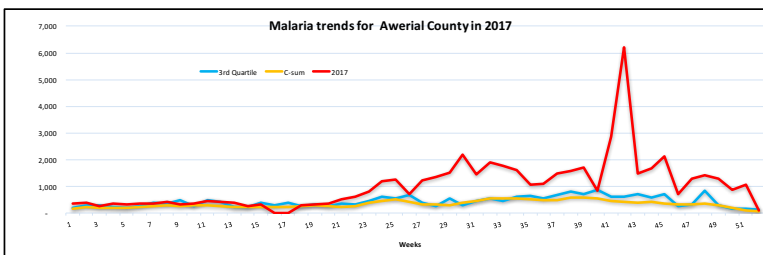
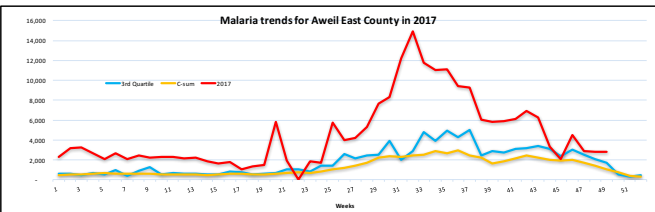


Map 3 | Map of malaria alerts by county (2017)

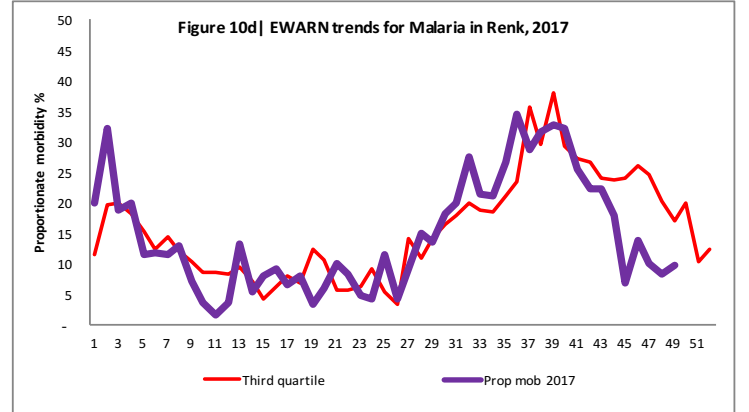
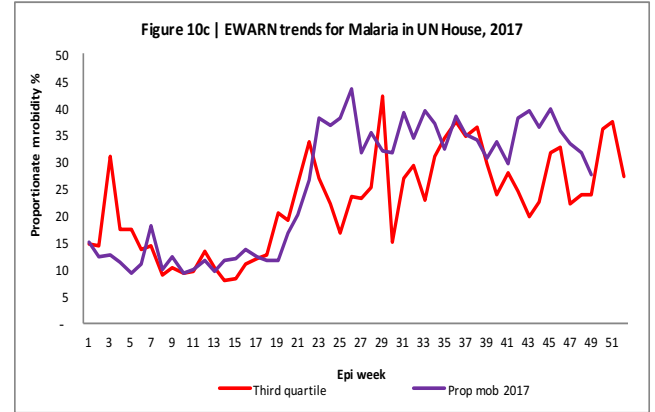
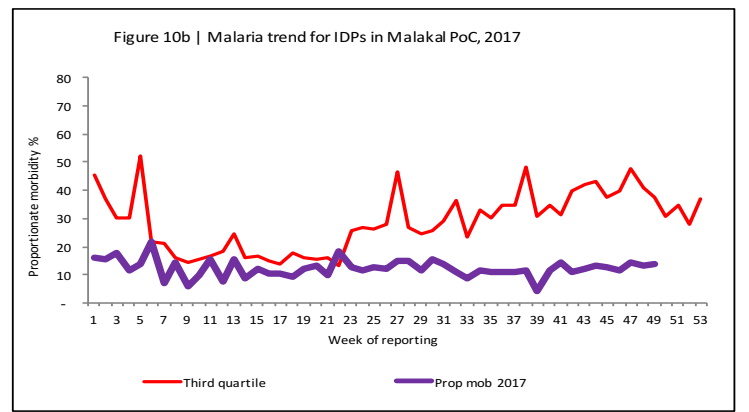
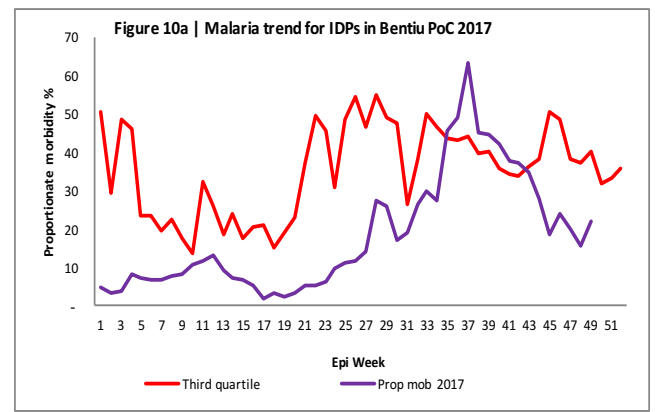


<p>Map legend</p> <p>Number of malaria cases</p> <p>Number of malaria alerts</p> <p>Alert threshold Twice the average number of cases over the past 3 weeks. <i>Source: IDSR</i></p>	<p>7 Alerts</p> <p>4 Verified</p>	<p>Risk Assessment</p> <table border="1" style="width: 100%; text-align: center;"> <tr> <td style="background-color: #2e8b57; color: white; padding: 10px;">0 Low Risk</td> <td style="background-color: #ffd700; color: white; padding: 10px;">0 Moderate Risk</td> <td style="background-color: #ff8c00; color: white; padding: 10px;">0 High Risk</td> <td style="background-color: #ff0000; color: white; padding: 10px;">0 Very High Risk</td> </tr> </table>	0 Low Risk	0 Moderate Risk	0 High Risk	0 Very High Risk
0 Low Risk	0 Moderate Risk	0 High Risk	0 Very High Risk			

Malaria trends returned to normal in the counties that registered high transmission during the rain season



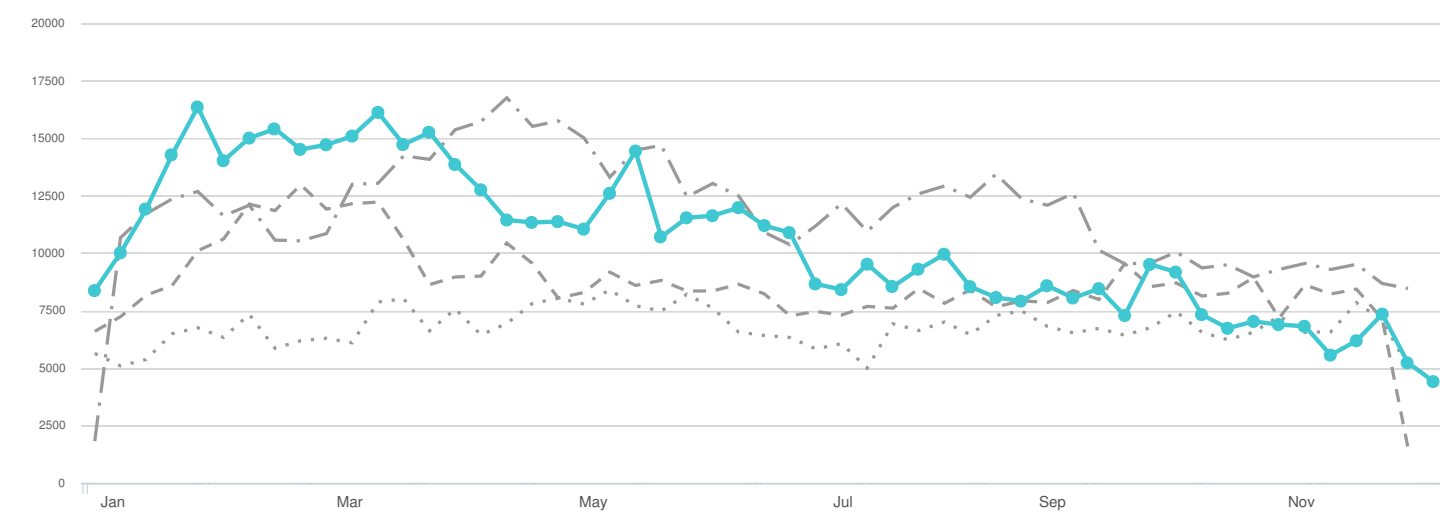
Malaria trends in select IDP sites



Malaria trends in four of the large IDP sites - Bentiu Poc; UN House Poc; Malakal PoC; and Renk are below the third quartile

Acute Watery Diarrhoea | Trends over time

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

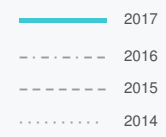


Graph legend

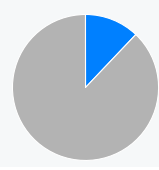
Key AWD indicators (2018)

Figure 5b | % morbidity

Figure 5c | Age breakdown



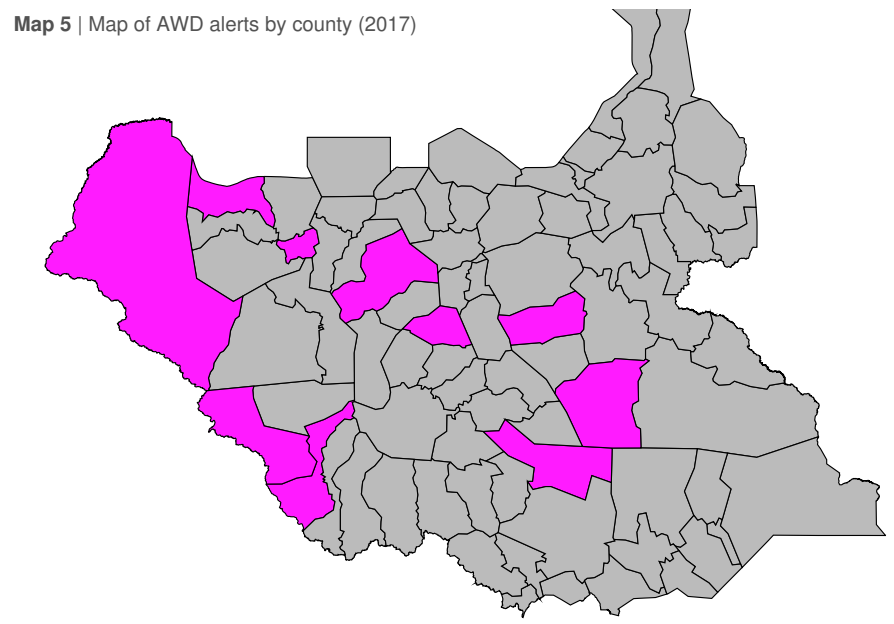
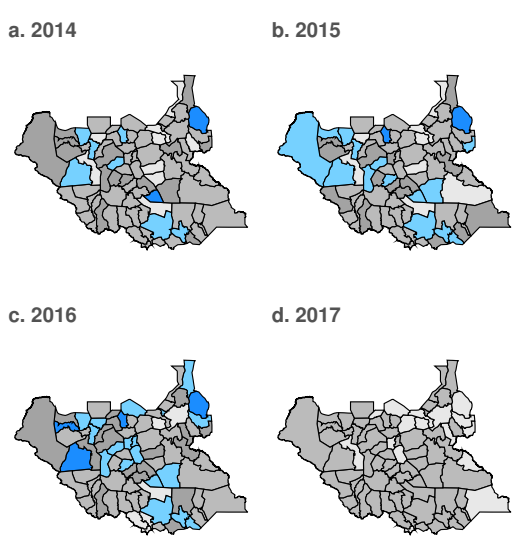
21,835 Cases
2 Deaths
14 Alerts



Acute Watery Diarrhoea | Maps and Alert Management

Map 4 | Map of AWD cases by county (2017)

Map 5 | Map of AWD alerts by county (2017)

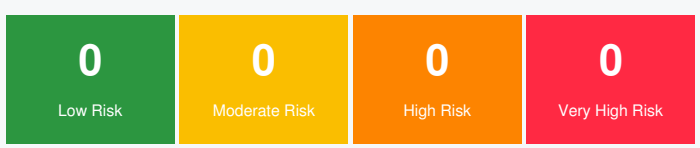


Map legend



14 Alerts
4 Verified

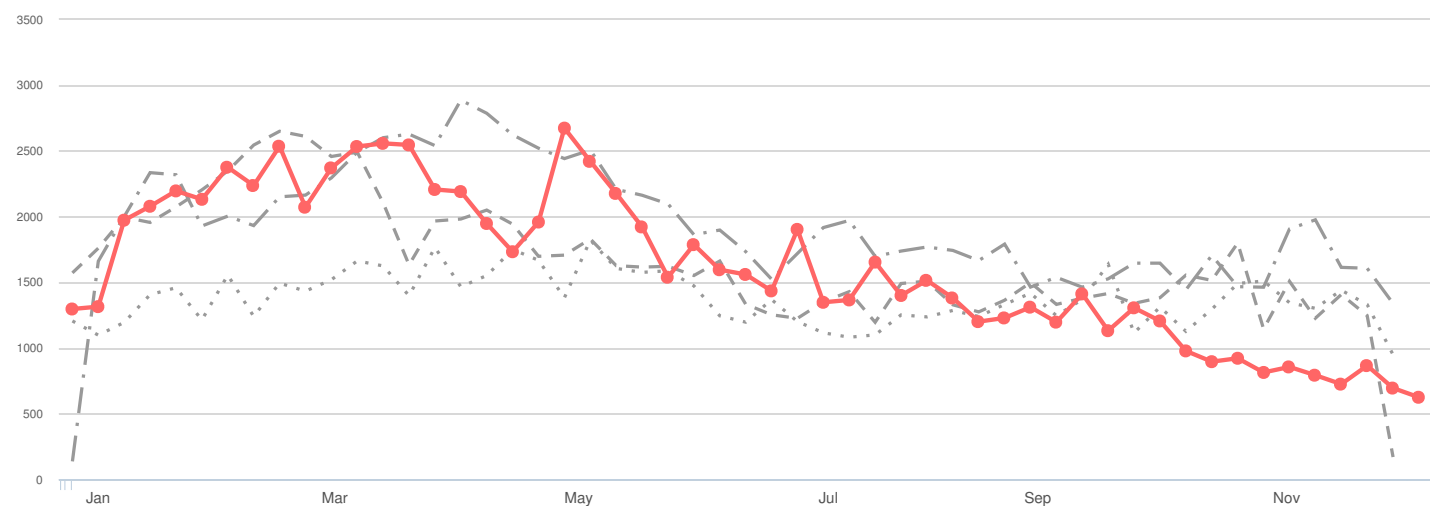
Risk Assessment



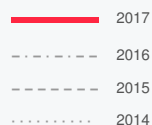
Alert threshold
 Twice the average number of cases over the past 3 weeks. Source: IDSR

Acute Bloody Diarrhoea | Trends over time

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



Graph legend



Key bloody diarrhoea indicators (2018)

3,375

Cases

0

Deaths

20

Alerts

Figure 6b | % morbidity

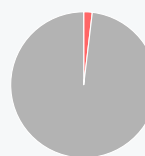
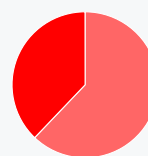
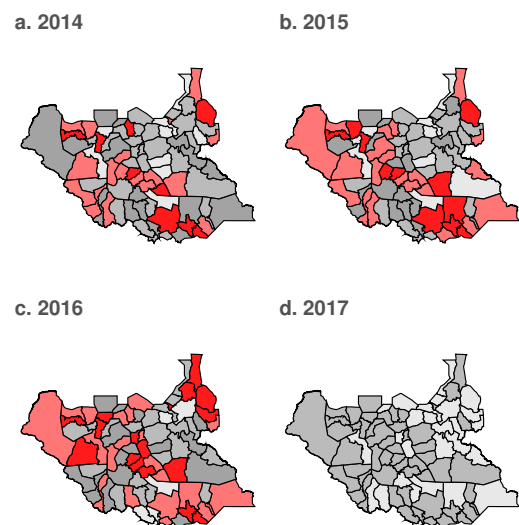


Figure 6c | Age breakdown

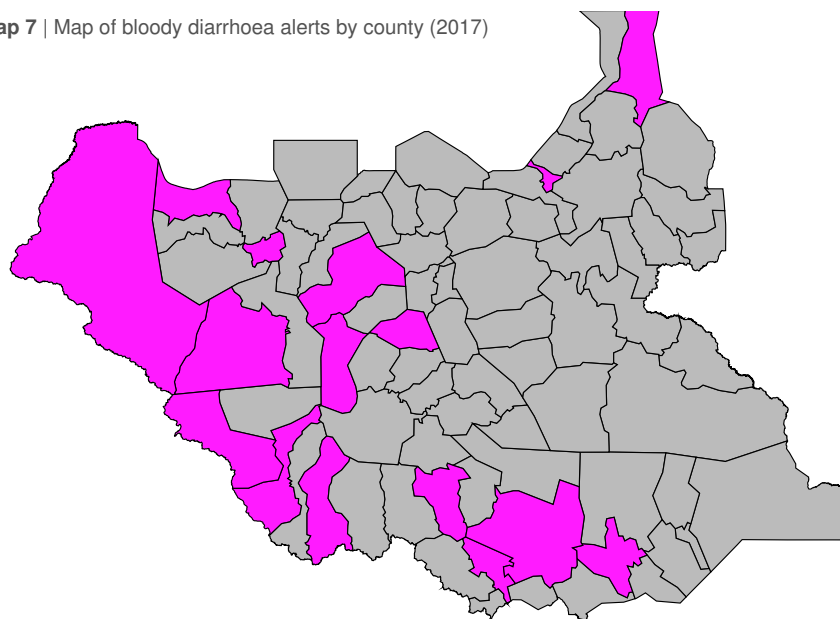


Acute Bloody Diarrhoea | Maps and Alert Management

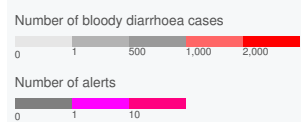
Map 6 | Map of bloody diarrhoea cases by county



Map 7 | Map of bloody diarrhoea alerts by county (2017)



Map legend



20

Alerts

4

Verified

Risk Assessment

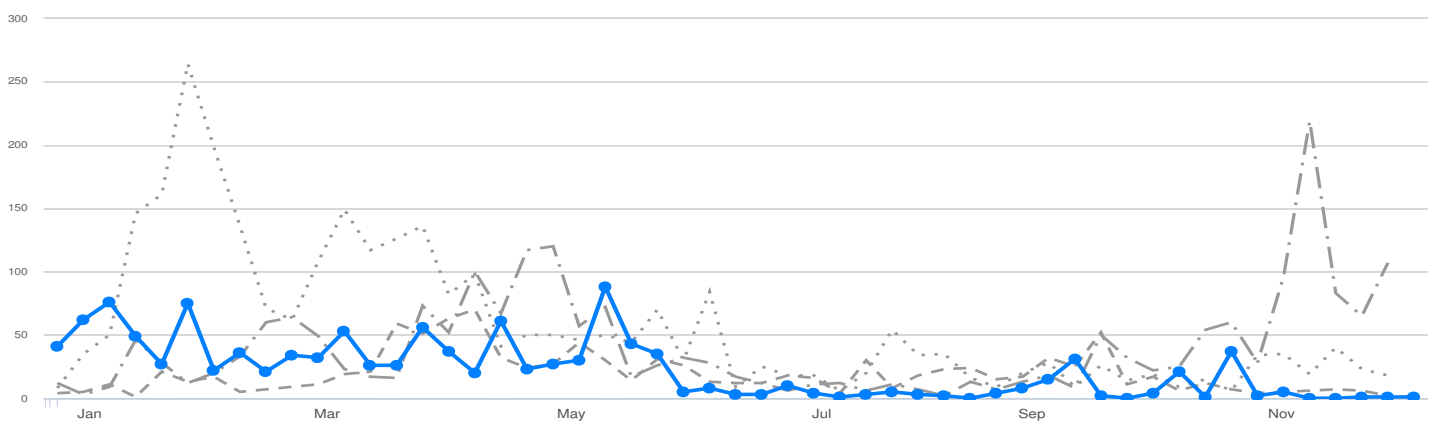


Alert threshold

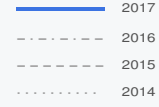
Twice the average number of cases over the past 3 weeks. Source: IDSR

Measles | Trends over time

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



Graph legend



Key measles indicators (2018)

37 Cases
1 Deaths
13 Alerts

Figure 7b | % morbidity

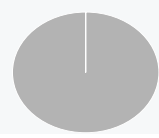
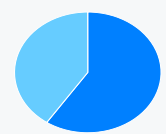


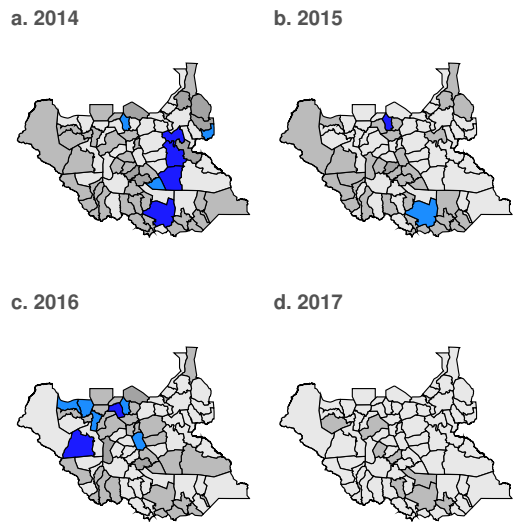
Figure 7c | Age breakdown



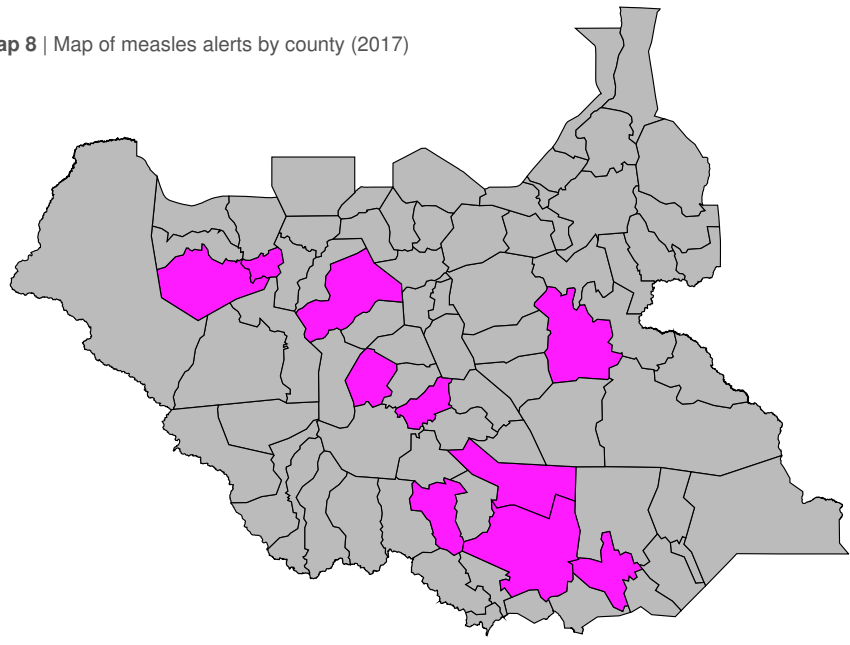
Since the beginning of 2018, at least 22 suspect measles cases including at least 1 death (CFR 4.5%) have been reported. Of these, 11 suspect cases have undergone measles case-based laboratory-backed investigation with 11 samples collected out of which 3 measles IgM positive cases have been reported.

Measles | Maps and Alert Management

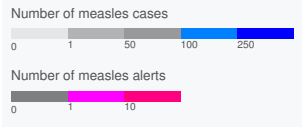
Map 7 | Map of measles cases by county (2017)



Map 8 | Map of measles alerts by county (2017)

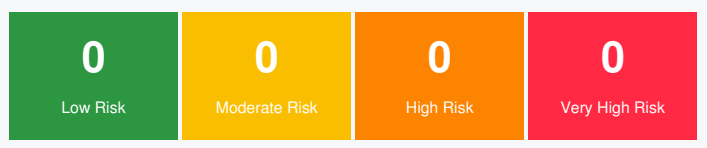


Map legend



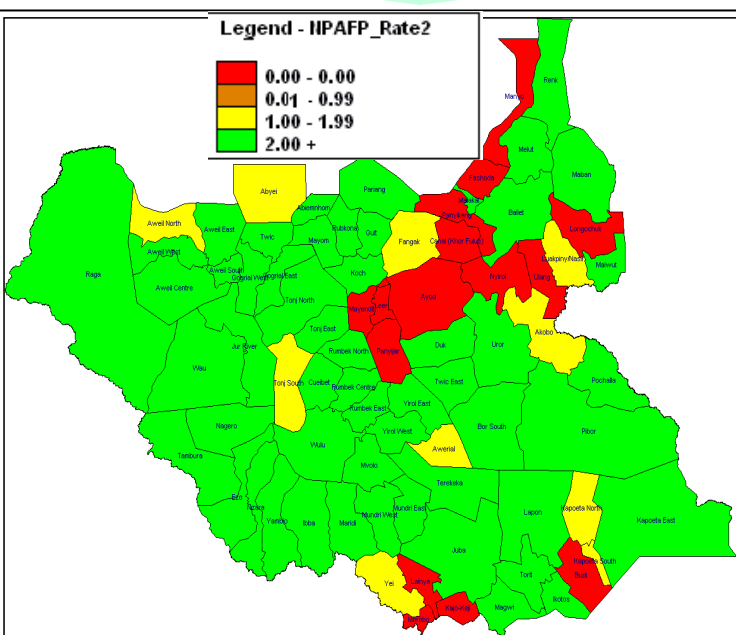
13 Alerts
7 Verified

Risk Assessment



Alert threshold

1 case.
 Source: IDSR



In week 3, 2018, four new AFP cases were reported from Central Equatoria, Jonglei, Northern Bahr el Ghazal, and Lakes hubs. This brings the cumulative total for 2018 to eight (8) AFP cases.

During 2017, a cumulative of 387 AFP cases were reported countrywide. The annualized non-Polio AFP (NPAFP) rate (cases per 100,000 population children 0-14 years) in 2017 was 4.71 per 100,000 population of children 0-14 years (target ≥ 2 per 100,000 children 0-14 years).

Stool adequacy was 87% in 2017, 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.

Source: South Sudan Weekly AFP Bulletin

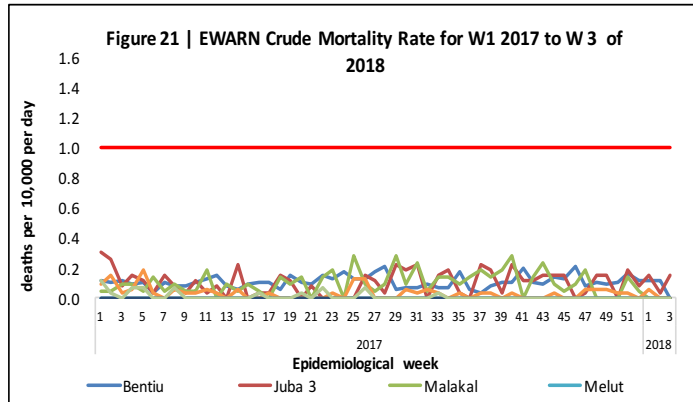
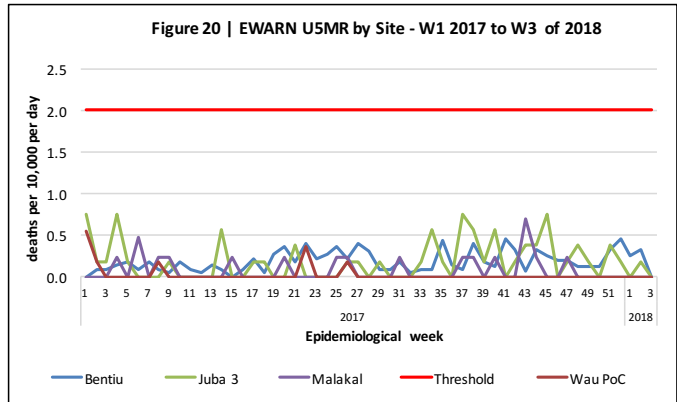
Mortality in the IDPs

Table 6 | Proportional mortality by cause of death in IDPs W3 2018

Cause of Death by IDP site	Juba 3	Total deaths	Proportional mortality [%]
	≥ 5 yrs		
pneumonia	1	1	25
HIV/AIDS	1	1	25
TB	1	1	25
Peptic ulcer disease	1	1	25
Total deaths	4	4	100

Among the IDPs, mortality data was received from UN House PoC in week 3. (Table 6). **A total of 4** deaths were reported during the week. UN House PoC reported 4 (100%) deaths in the week. During the week, 0 (0%) deaths were recorded among children < 5 years in (Table 6).

The causes of death during week 3 are shown in Table 6.



The U5MR in all the IDP sites that submitted mortality data in week 3 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 3 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 W3, 2018

IDP site	Asthma	Cancer	Heart Failure	Kala-Azar	Liver Cirrhosis	Malaria	Meningitis	Perinatal death	Pneumonia	SAM	Sepsis	Shock	TB/HIV	Trauma	HIV/AIDS	TB	Unkown	LRTI Bleeding	Acute watery diarrhoea	Peptic ulcer disease	Grand Total	
Bentiu			1			1	1	3	2	1	1	3	1				3	1				18
Juba 3	1	1			1	1			1						1	1			1	1		9
Akobo				1										1								2
Grand Total	1	1	1	1	1	2	1	3	3	1	1	3	1	1	1	1	3	1	1	1	29	
Proportionate mortality [%]	3.4	3.4	3.4	3.4	3.4	6.9	3.4	10.3	10.3	3.4	3.4	10.3	3.4	3.4	3.4	3.4	10.3	3.4	3.4	3.4	100.0	

- A total of 29 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>

