South Sudan

Integrated Disease Surveillance and Response (IDSR)

Annexes W51 2018 (Dec 17 – Dec 23)

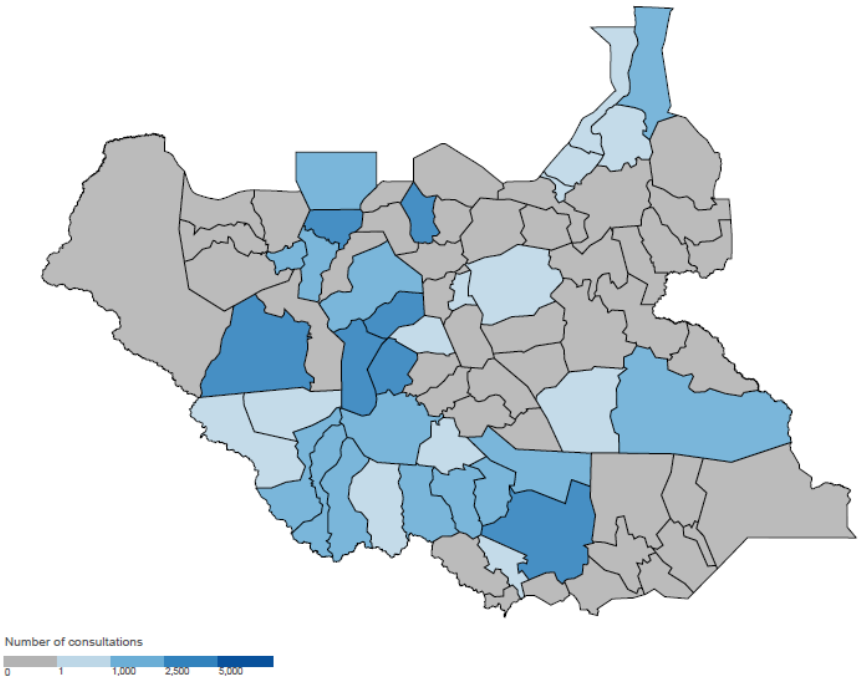
World Health Organization
South Sudan

Ministry of Health
Republic of South Sudan

Contents

Access and Utilization | Map of consultations by county

Map 1 | Map of total consultations by county (W51 2018)



Hub	W51	2018
Aweil	1,231	701,183
Bentiu	3,777	821,553
Bor	2,341	569,859
Juba	7,363	657,173
Kwajok	15,238	1,299,050
Malakal	3,239	779,621
Rumbek	4,673	953,209
Torit	0	314,917
Wau	4,638	536,440
Yambio	10,837	576,549
South Sudan	**53,337**	**7,209,554**

The total consultation in the country since week 1 of 2018 is 7,209,554 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.

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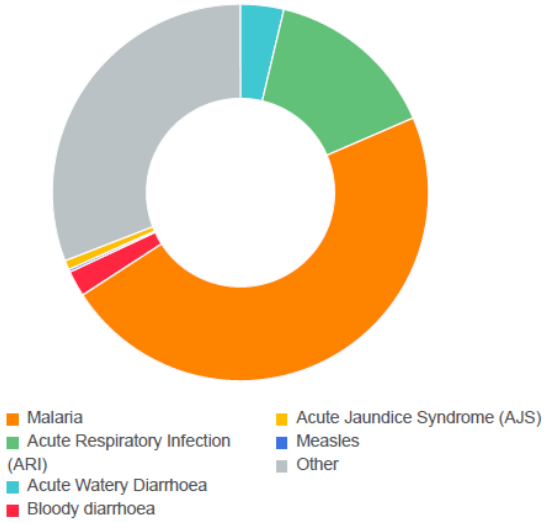
Proportional mortality

Figure 1 | Proportional mortality (2018)

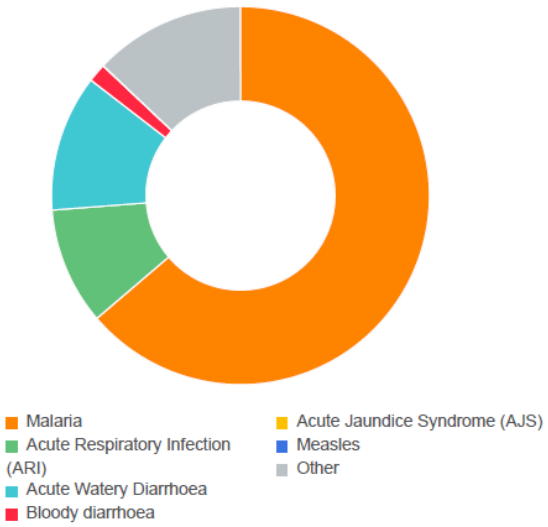


Syndrome	W51		2018	
	# deaths	% mortality	# deaths	% mortality
Malaria	3	100.0%	636	47.3%
ARI	0	0.0%	199	14.8%
AWD	0	0.0%	50	3.7%
Bloody diarrhoea	0	0.0%	30	2.2%
AJS	0	0.0%	11	0.8%
Measles	0	0.0%	3	0.2%
Other	0	0.0%	415	30.9%
Total deaths	**3**	**100%**	**1,344**	**100%**

Figure 1, above shows the proportional mortality for 2018, with malaria being the main cause of mortality accounting for 47.3% of the deaths since week 1 of 2018, followed by ARI AWD and bloody diarrhoea.

Proportional morbidity

Figure 2 | Proportional morbidity (2018)



Syndrome	W51		2018	
	# cases	% morbidity	# cases	% morbidity
Malaria	14,797	53.1%	2,632,816	63.8%
ARI	3,862	13.9%	414,183	10.0%
AWD	3,017	10.8%	482,450	11.7%
Bloody diarrhoea	348	1.2%	65,582	1.6%
AJS	1	0.0%	220	0.0%
Measles	4	0.0%	484	0.0%
Other	5,838	20.9%	534,014	12.9%
Total cases	**27,867**	**100%**	**4,129,749**	**100%**

Figure 2, indicates the top causes of morbidity in the country, with malaria being the leading cause of morbidity 2,632,816 (63.8%) followed by ARI, AWD and ABD respectively since week 1 of 2018. refer to the figure above for more information.

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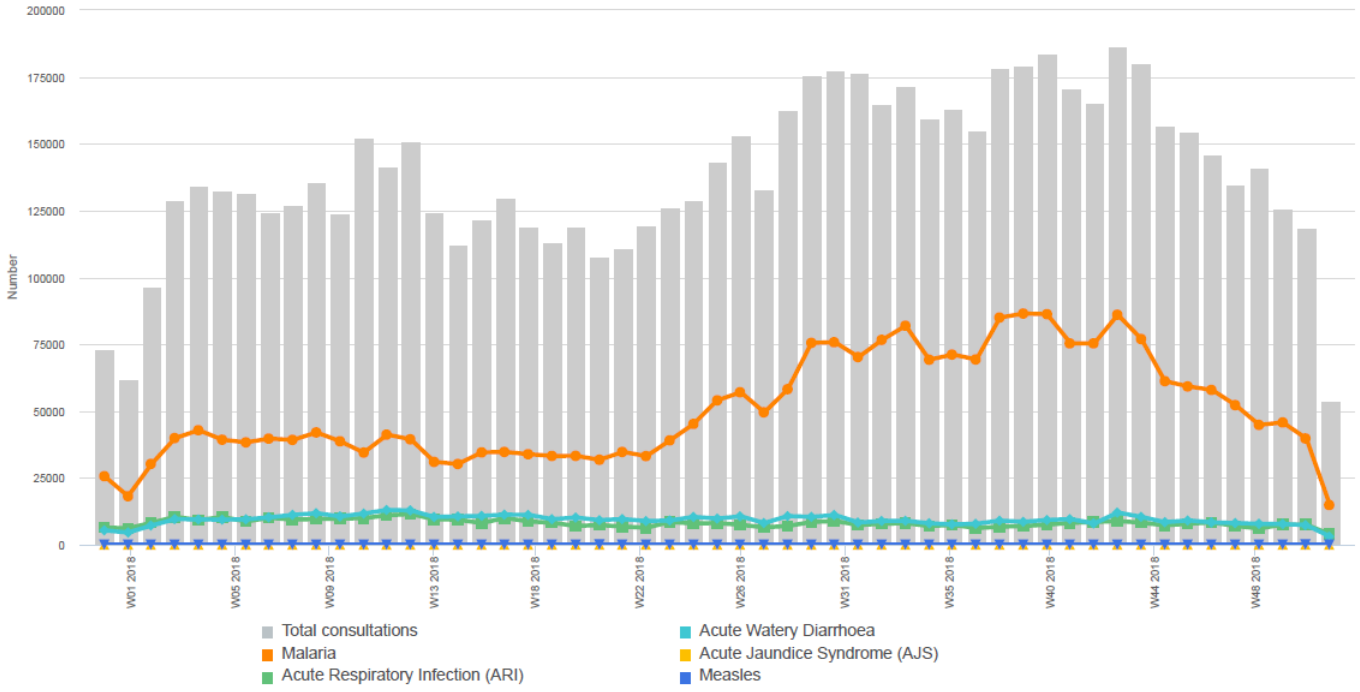
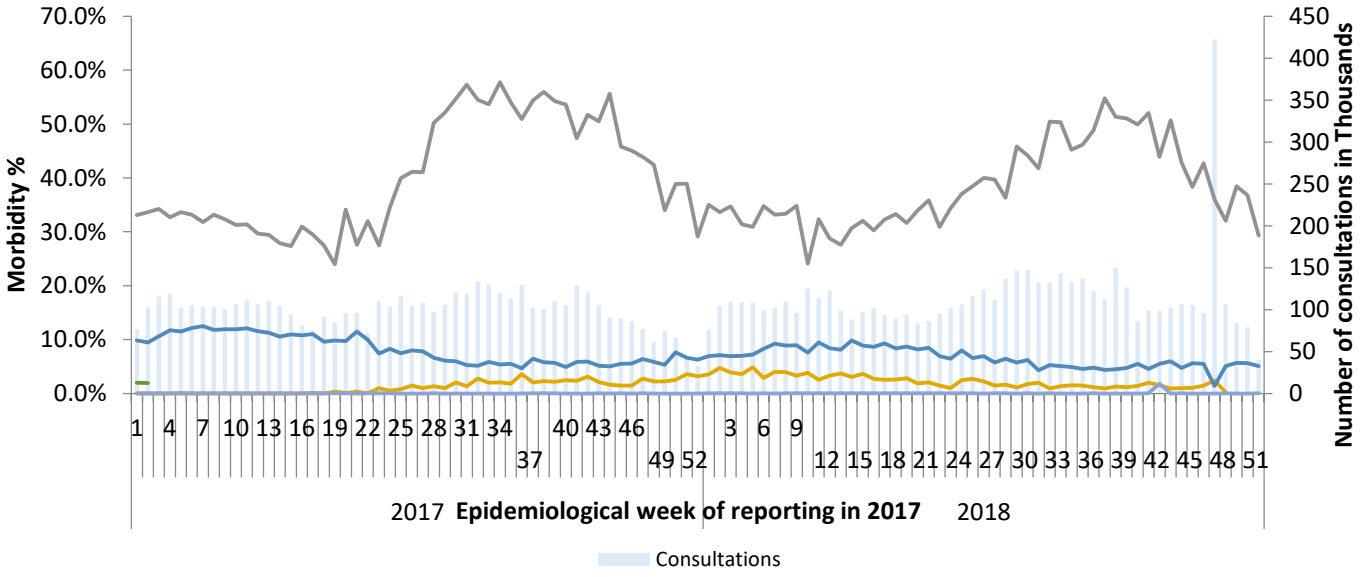
Trend in consultations and key diseases

Figure 3 | Trend in total consultations and key diseases (W51)



IDSR Proportionate morbidity trends - in relatively stable states

Fig. 1 | IDSR Proportionate morbidity trends, week 1, 2017 to 51, 2018



In the relatively stable states, malaria is the top cause of morbidity accounting for 29.3% of the consultations in week 51 (representing a decline from 36.8% in week 50).

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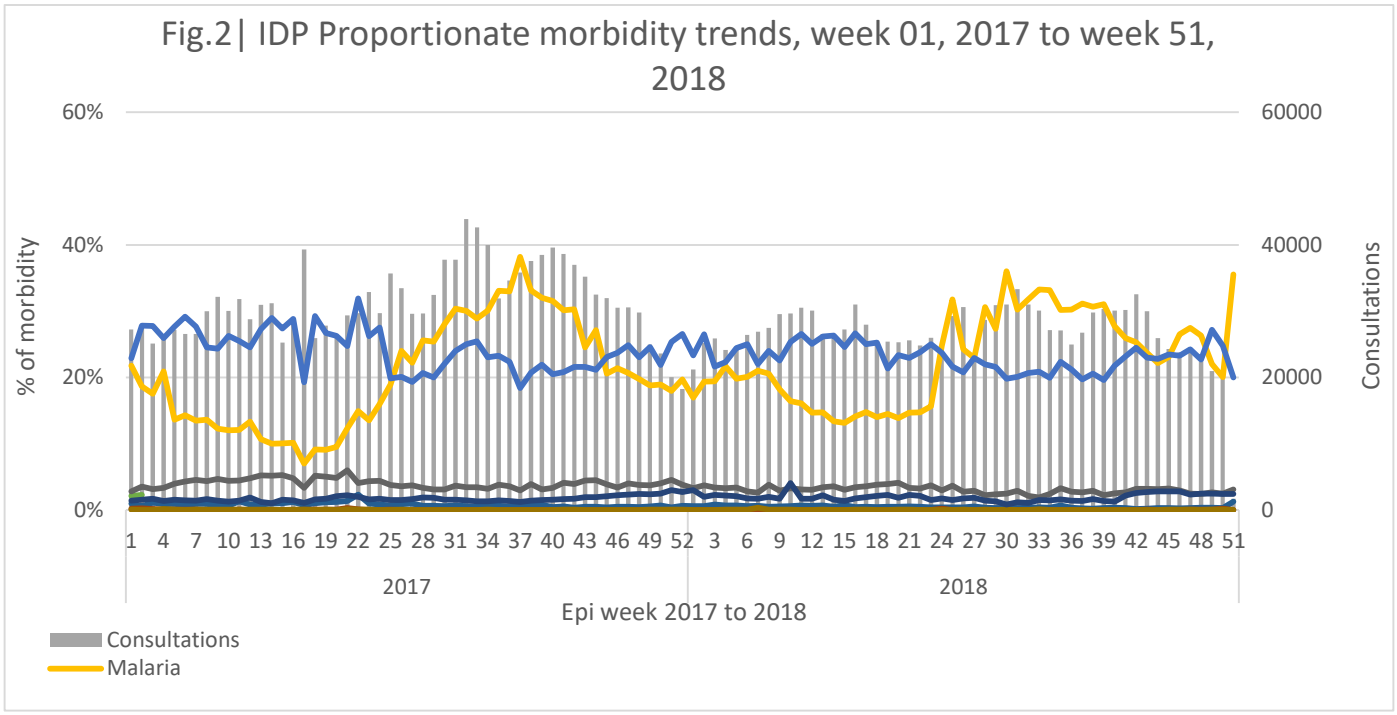
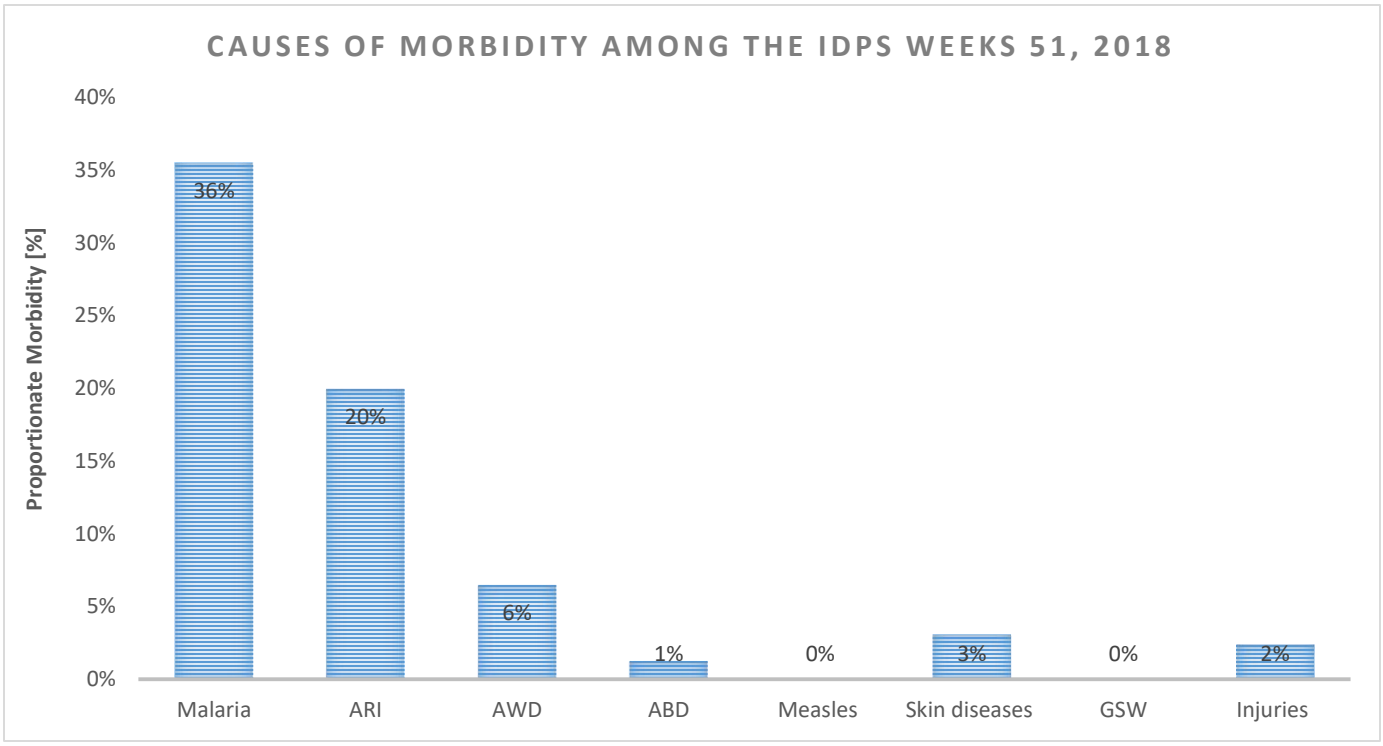
IDP Proportionate morbidity trends - in displaced population



Among the IDPs, malarial and ARI accounted for 36% and 20% of the consultations in week 51. The other significant causes of morbidity in the IDPs includes AWD, Skin diseases, and Measles.

IDP Proportionate morbidity trends - in displaced population



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

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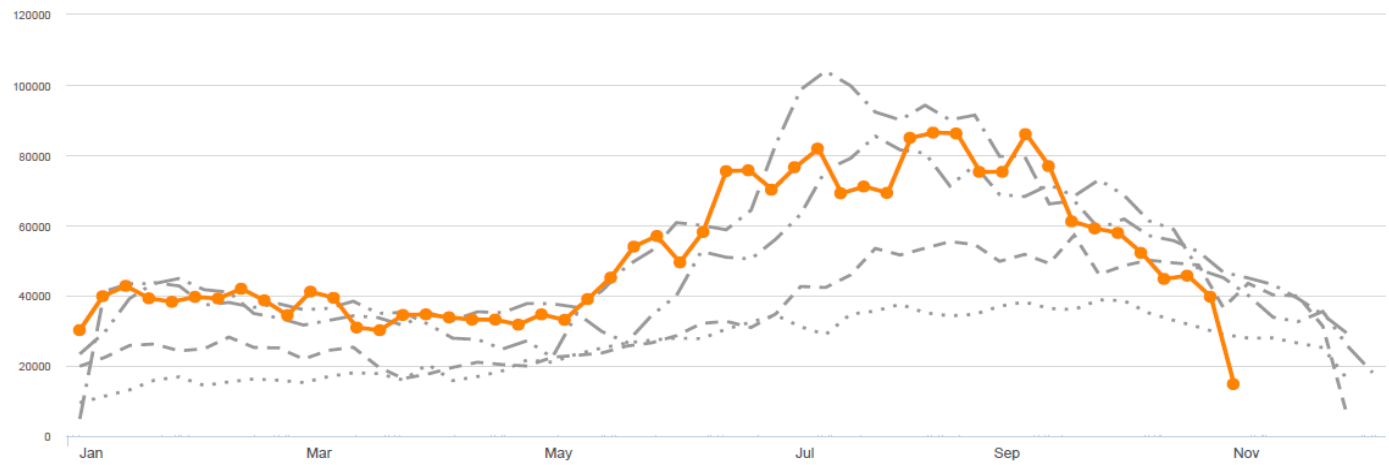
Malaria| Trends over time

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



Graph legend

2018
2017
2016
2015
2014

Key malaria indicators (2018)

2,632,816	636	157
Cases	Deaths	Alerts

Figure 4b | % morbidity

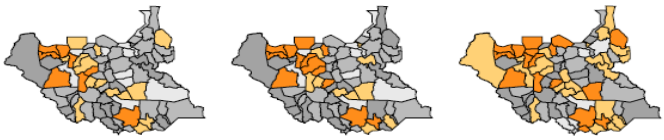
Figure 4c | Age breakdown

Malaria is the top course of Morbidity in the country, a total of 2,632,816 cases with 636 deaths registered since week 1 of 2018. malaria trend for week 51 of 2018 is below 2014, 2015,2016, and 2017 as shown in the figure 4a, above.

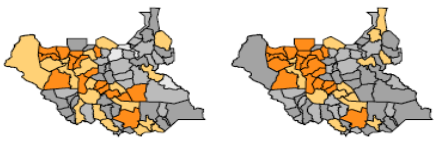
Malaria| Maps and Alert Management

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

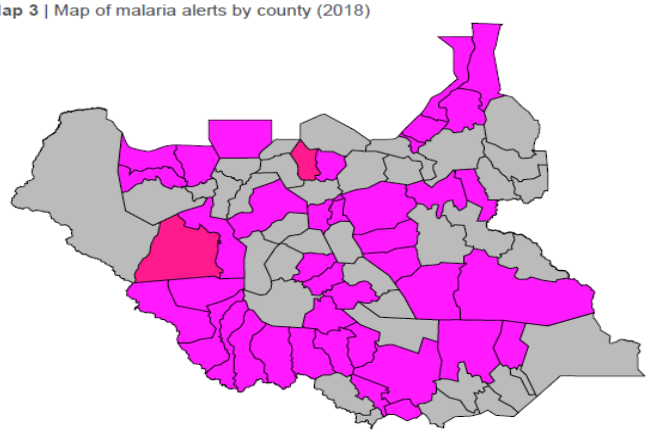
a. 2014 b. 2015 c. 2016



d. 2017 d. 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*

157	112
Alerts	Verified

Risk Assessment

2	0	1	1
Low Risk	Moderate Risk	High Risk	Very High Risk

Since the beginning of the year, a total of 157 malaria alerts have been triggered, 112 of those were verified. The Maps above indicate the location reporting malaria alerts from 2014, 2015, 2016, 2017, and 2018.

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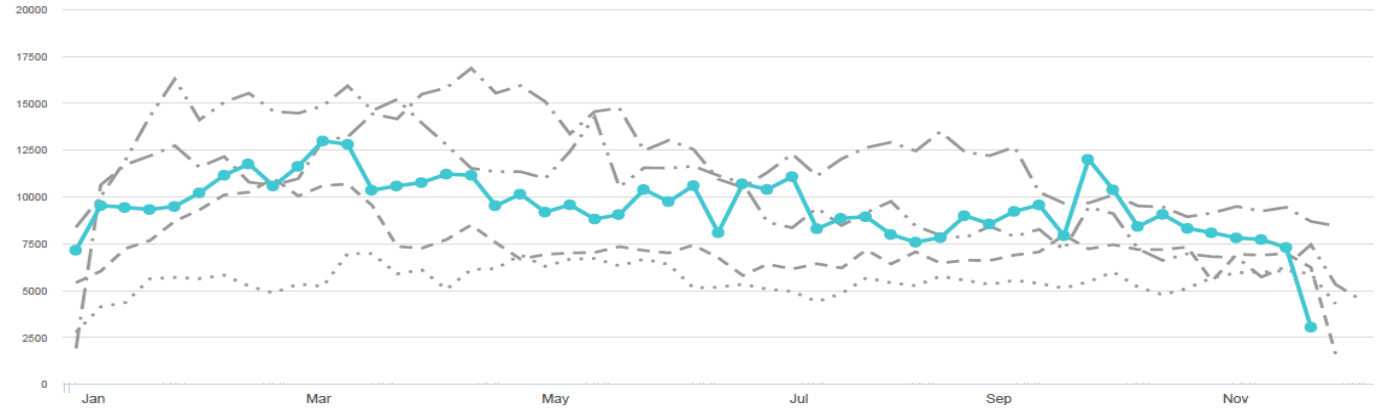
Acute Watery Diarrhoea| Trends over time

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



Graph legend

2018
2017
2016
2015
2014

Key AWD indicators (2018)

482,450	50	150
Cases	Deaths	Alerts

Figure 5b | % morbidity

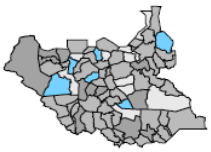
Figure 5c | Age breakdown

AWD is one of the top causes of morbidity in the country with 482, 450 cases reported since week 1 of 2018 including 50 deaths. AWD trend for week 51 of 2018,is below 2014,2015, 2016 and 2017, as shown in figure 5a, above.

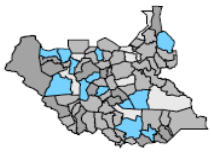
Acute Watery Diarrhoea| Maps and Alert Management

Map 4 | Map of AWD cases by county (2018)

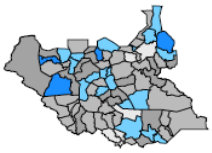
a. 2014



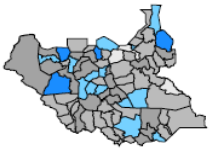
b. 2015



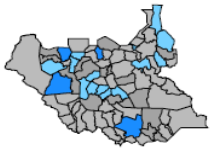
c. 2016



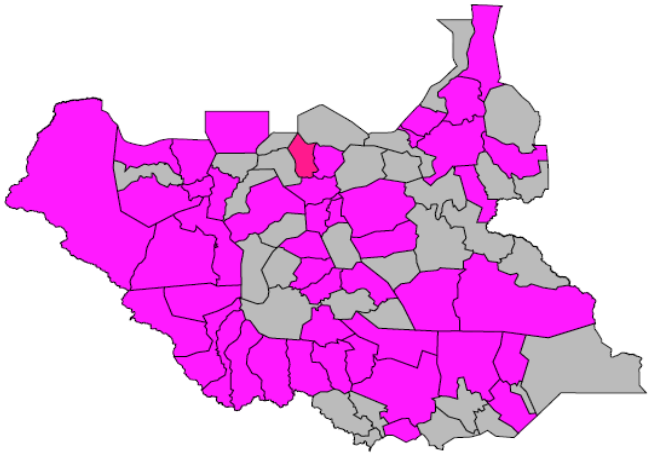
d. 2017



d. 2018



Map 5 | Map of AWD alerts by county (2018)



Map legend

Number of AWD cases

0 1 5,000 10,000 20,000

Number of AWD alerts

0 1 10

Alert threshold

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

150	103
Alerts	Verified

Risk Assessment

0	1	0	0
Low Risk	Moderate Risk	High Risk	Very High Risk

The number of AWD alerts triggered since week 1 of 2018 is 150, out of which 103 were verified. Maps above highlight the areas reporting AWD alerts from 2014 to 2018 .

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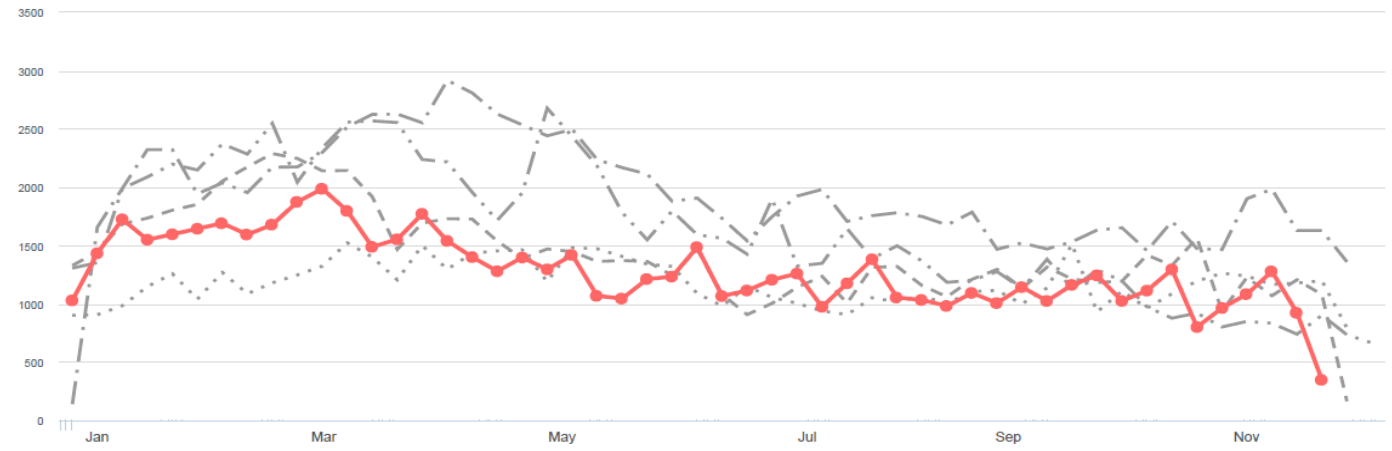
Acute Bloody Diarrhoea | Trends over time

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



Graph legend

2018
2017
2016
2015
2014

Key bloody diarrhoea indicators (2018)

65,582	30	191
Cases	Deaths	Alerts

Figure 6b | % morbidity

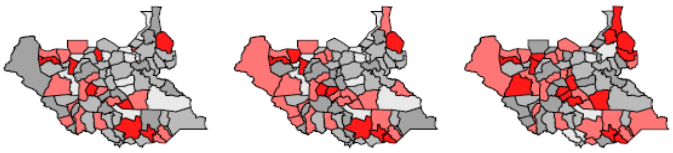
Figure 6c | Age breakdown

Since week 1 of 2018, a total of 65, 582 cases of ABD have been reported country wide including 30 death. ABD trend for 2018 is below 2014, 2015, 2016, and 2017 respectively. Refer to figure 6a, above.

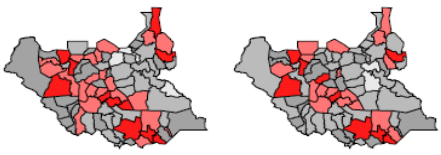
Acute Bloody Diarrhoea | Maps and Alert Management

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

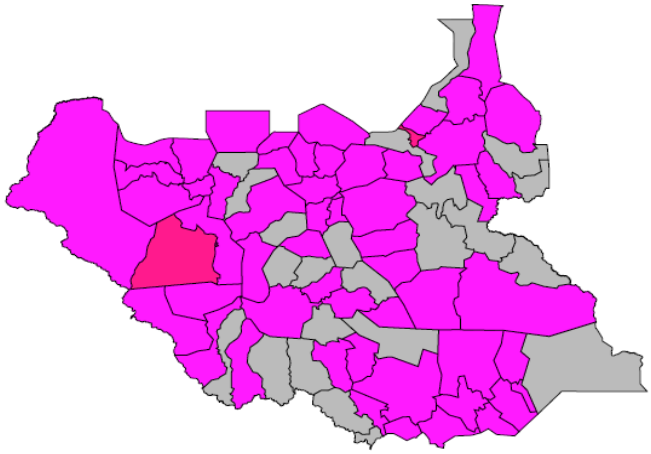
a. 2014 b. 2015 c. 2016



d. 2017 d. 2018



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



Map legend

Number of bloody diarrhoea cases

0 1 500 1,000 2,000

Number of alerts

0 1 10

Alert threshold

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

191	140
Alerts	Verified

Risk Assessment

1	0	0	0
Low Risk	Moderate Risk	High Risk	Very High Risk

Total of 191 alerts were generated since week 1 of 2018, of which 140 were verified by the county surveillance team. Maps indicating areas triggering alerts since 2014 to 2018 are shown above.

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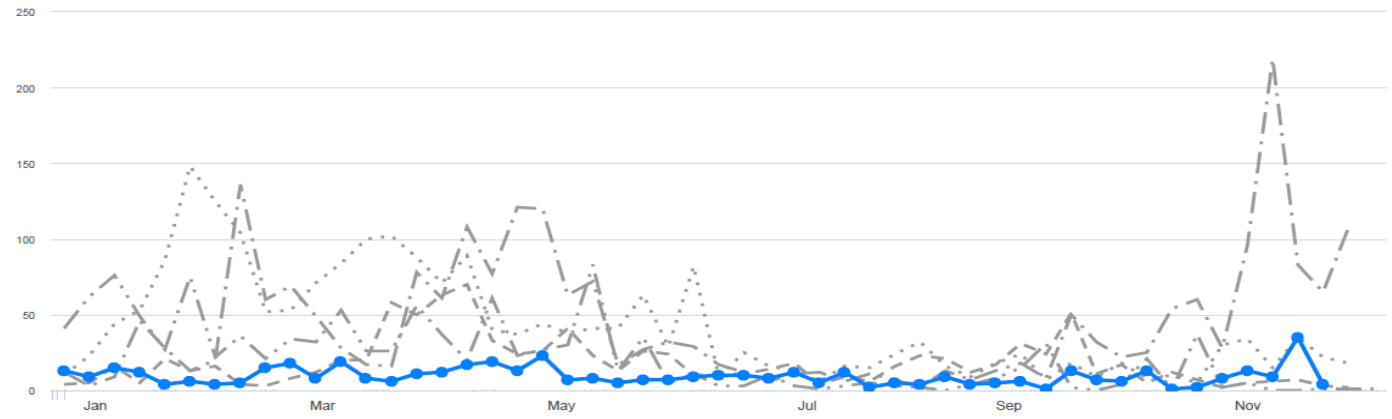
Measles| Trends over time

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



Graph legend

- 2018
- 2017
- 2016
- 2015
- 2014

Key measles indicators (2018)

484	3	160
Cases	Deaths	Alerts

Figure 7b | % morbidity

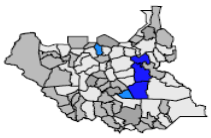
Figure 7c | Age breakdown

Since the beginning of 2018, at least 484 suspect measles cases including 3 death (CFR 0.74%) have been reported. . Of these, 415 suspect cases have undergone measles case-based laboratory-backed investigation with 309 samples collected out of which 48 measles IgM positive cases; 78 clinically confirmed cases; and 56 cases confirmed by epidemiological linkage.

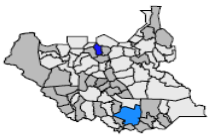
Measles| Maps and Alert Management

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

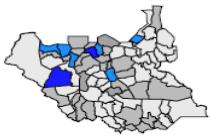
a. 2014



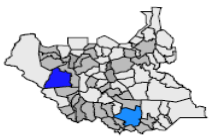
b. 2015



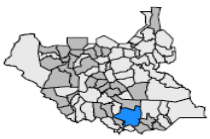
c. 2016



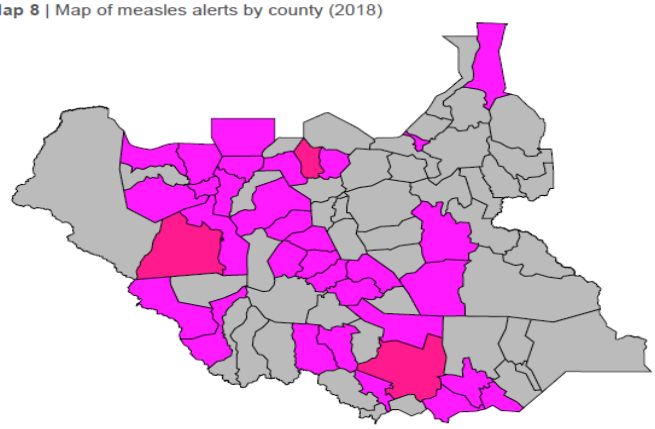
d. 2017



d. 2018



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



Map legend

Number of measles cases

0 1 50 100 250

Number of measles alerts

0 1 10

Alert threshold

1 case.

Source: IDSR

160	127
Alerts	Verified

Risk Assessment

1	1	2	0
Low Risk	Moderate Risk	High Risk	Very High Risk

Since week 1 of 2018, 160 alerts of measles were triggered and 127 of those have been verified at county level. Maps of areas raising alerts from 2014 to 2018 are shown above.

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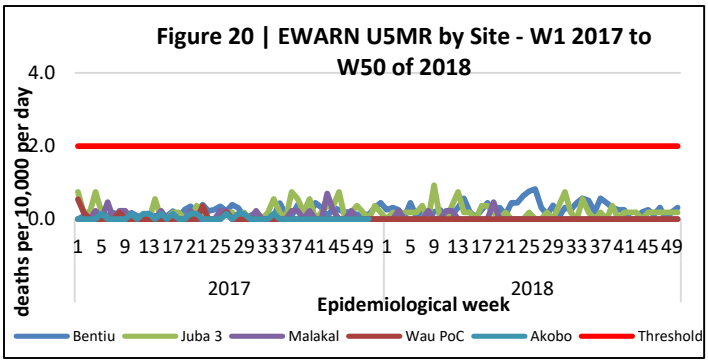
Table 6 | Proportional mortality by cause of death in IDPs W50 2018

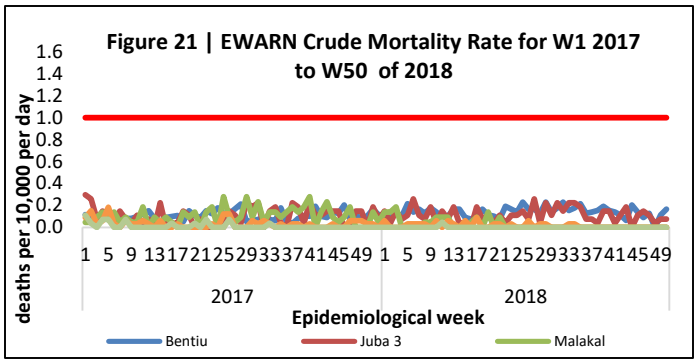
Cause of Death by IDP site	Bentiu		Juba 3		Total deaths
	<5yrs	≥5yrs	<5yrs	≥5yrs	
acute watery diarrhoea		1			1
Aspiration	1	1			2
Hepatitis B				1	1
Hydrocephalus	1				1
perinatal death			1		1
Respiratory failure	1				1
Unknown		2			2
Hypoglycemia	1				1
Anaemia		1			1
Hep C		1			1
Lower Birth Weight.	1				1
Haemoptysis die in ER at arrival.		1			1
Chronic heart Failure + Tuberclosis.		1			1
Total deaths	**5**	**8**	**1**	**1**	**15**

Among the IDPs, mortality data was received from Bentiu POC & Juba 3 in week 50. (Table 6). **A total of 15** deaths were reported during the week; in Juba 3 (2), Bentiu POC (13) in the week. During the week, 9 (60%) of the deaths were recorded among children ≥5yrs in (Table 6).

The causes of death during week50 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 50 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 50 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 W50, 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	13	1	8	2	3	55	3	30	14	1	20	25	14	1	31	7	330	558
Juba 3	1	1		5		12		3	9		3	1	1		15	7	95	153
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	**14**	**3**	**9**	**10**	**6**	**72**	**3**	**34**	**26**	**1**	**25**	**28**	**16**	**2**	**46**	**16**	**452**	**763**
Proportionate mortality [%]	2%	0%	1%	1%	1%	9%	0%	4%	3%	0%	3%	4%	2%	0%	6%	2%	59%	100%

A total of 763 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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Ministry of Health Republic of South Sudan

This bulletin is produced by the Ministry of Health with Technical support from WHO

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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

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