South Sudan

Integrated Disease Surveillance and Response (IDSR)

Annexes W22 2018 (May 28 – June 3)

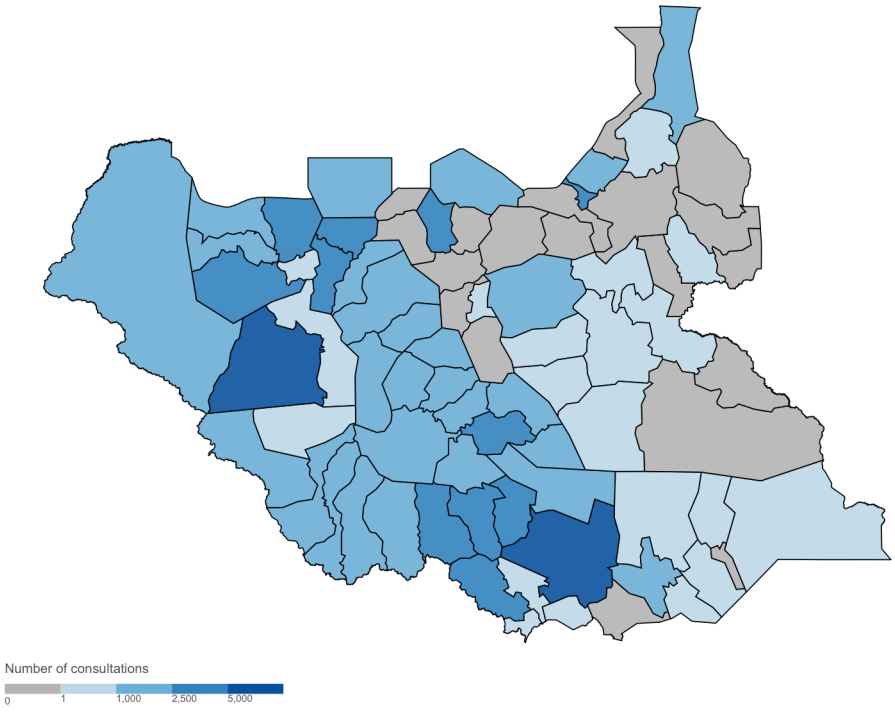
Ministry of Health
Republic of South Sudan

World Health Organization
South Sudan

Contents

Access and Utilization | Map of consultations by county

Map 1 | Map of total consultations by county (W22 2018)



Hub	W22	2018
Aweil	11,252	274,615
Bentiu	7,137	341,247
Bor	5,870	220,989
Juba	14,291	230,912
Kwajok	15,080	509,050
Malakal	7,297	236,664
Rumbek	15,677	348,877
Torit	4,196	119,214
Wau	8,924	184,624
Yambio	18,430	248,622
South Sudan	**108,154**	**2,714,814**

The total consultation in the country since week 1 of 2018 is 2,714,814 by hub, Kwajok registered the highest number of consultations (509,050) in 2018 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.

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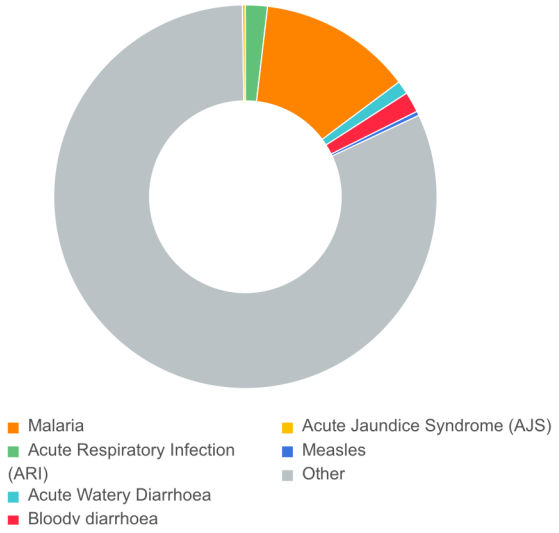
Proportional mortality

Figure 1 | Proportional mortality (2018)

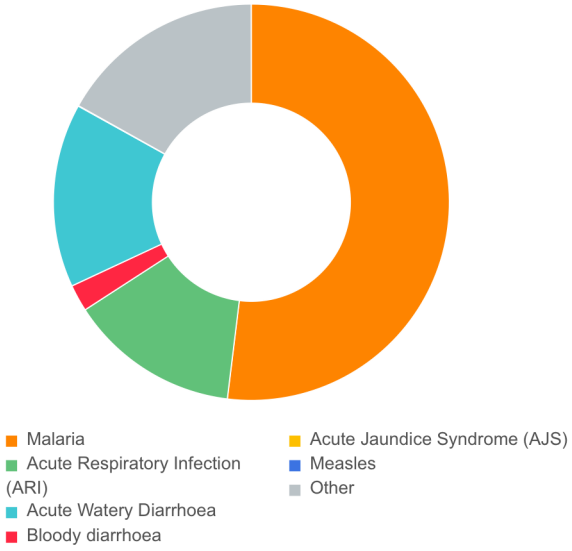


Syndrome	W22		2018	
	# deaths	% mortality	# deaths	% mortality
Malaria	7	41.2%	104	12.9%
ARI	0	0.0%	15	1.9%
AWD	0	0.0%	9	1.1%
Bloody diarrhoea	0	0.0%	14	1.7%
AJS	0	0.0%	2	0.2%
Measles	2	11.8%	3	0.4%
Other	8	47.1%	657	81.7%
Total deaths	**17**	**100%**	**804**	**100%**

Figure 1, above shows the proportional mortality for 2018, with malaria being the main cause of mortality accounting for 12.9% of the deaths since week 1 of 2018, followed by bloody diarrhoea, and acute watery diarrhoea.

Proportional morbidity

Figure 2 | Proportional morbidity (2018)



Syndrome	W22		2018	
	# cases	% morbidity	# cases	% morbidity
Malaria	30,742	54.7%	781,973	51.9%
ARI	5,912	10.5%	209,768	13.9%
AWD	7,869	14.0%	225,904	15.0%
Bloody diarrhoea	925	1.6%	32,882	2.2%
AJS	8	0.0%	113	0.0%
Measles	8	0.0%	351	0.0%
Other	10,754	19.1%	254,411	16.9%
Total cases	**56,218**	**100%**	**1,505,402**	**100%**

Figure 2, indicates the top causes of morbidity in the country, with malaria being the leading cause of morbidity 781,973 (51.9%) followed by ARI, AWD and ABD respectively since week 1 of 2018. refer to the figure above for more information.

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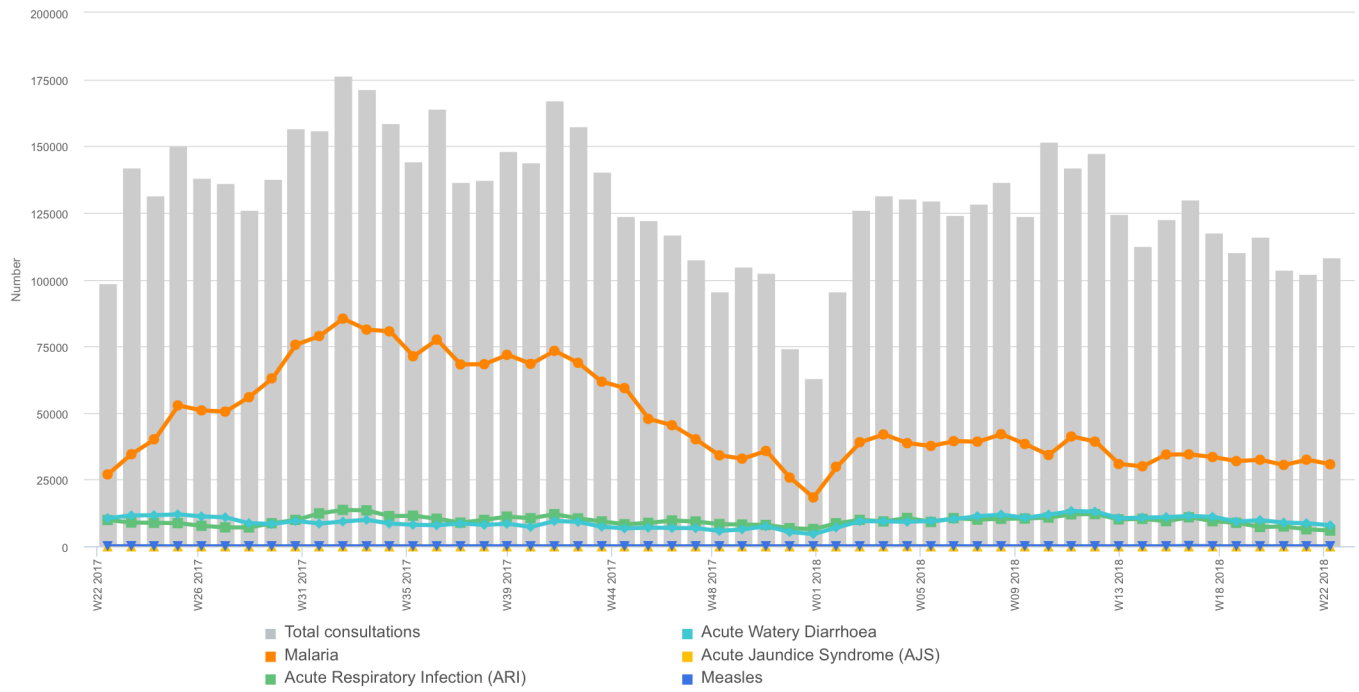
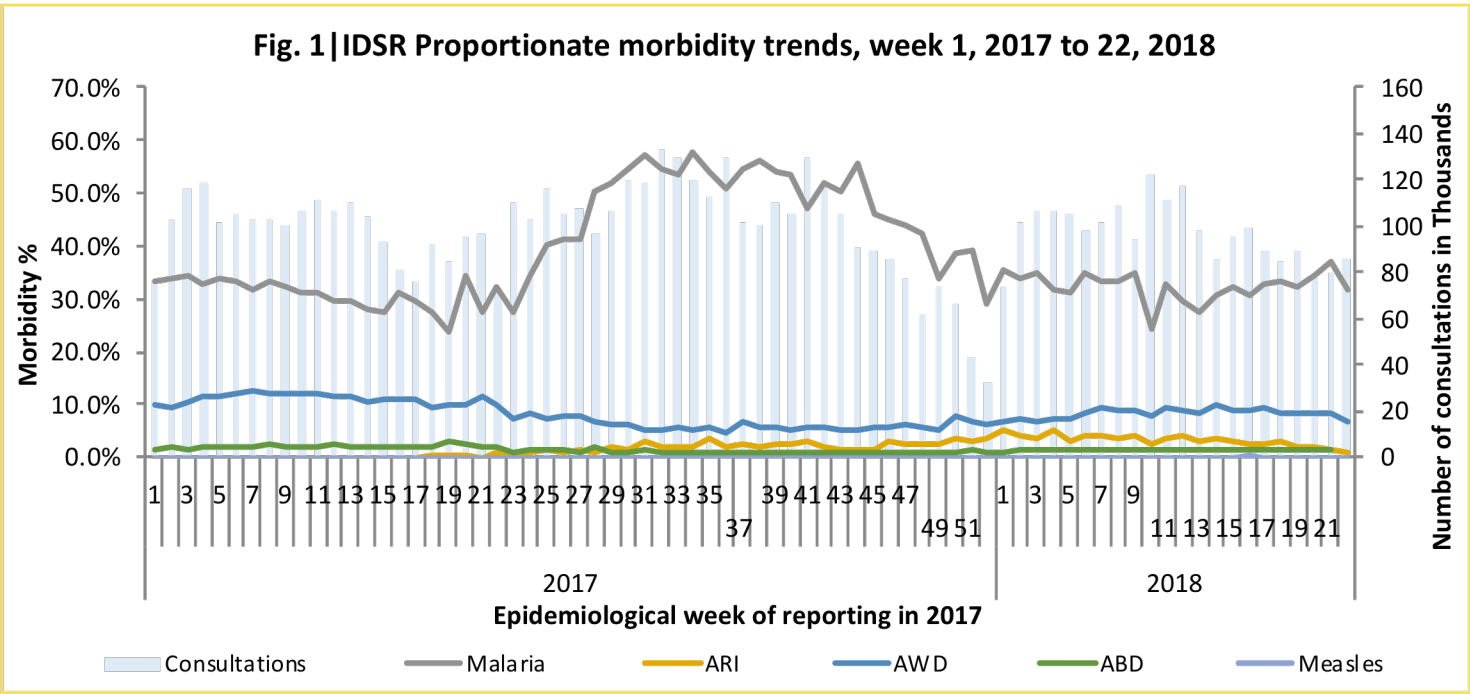
Trend in consultations and key diseases

Figure 3 | Trend in total consultations and key diseases (W22)



IDSR Proportionate morbidity trends - in relatively stable states



In the relatively stable states, malaria is the top cause of morbidity accounting for 31.9% of the consultations in week 22 (representing an decrease from 36.9% in week21).

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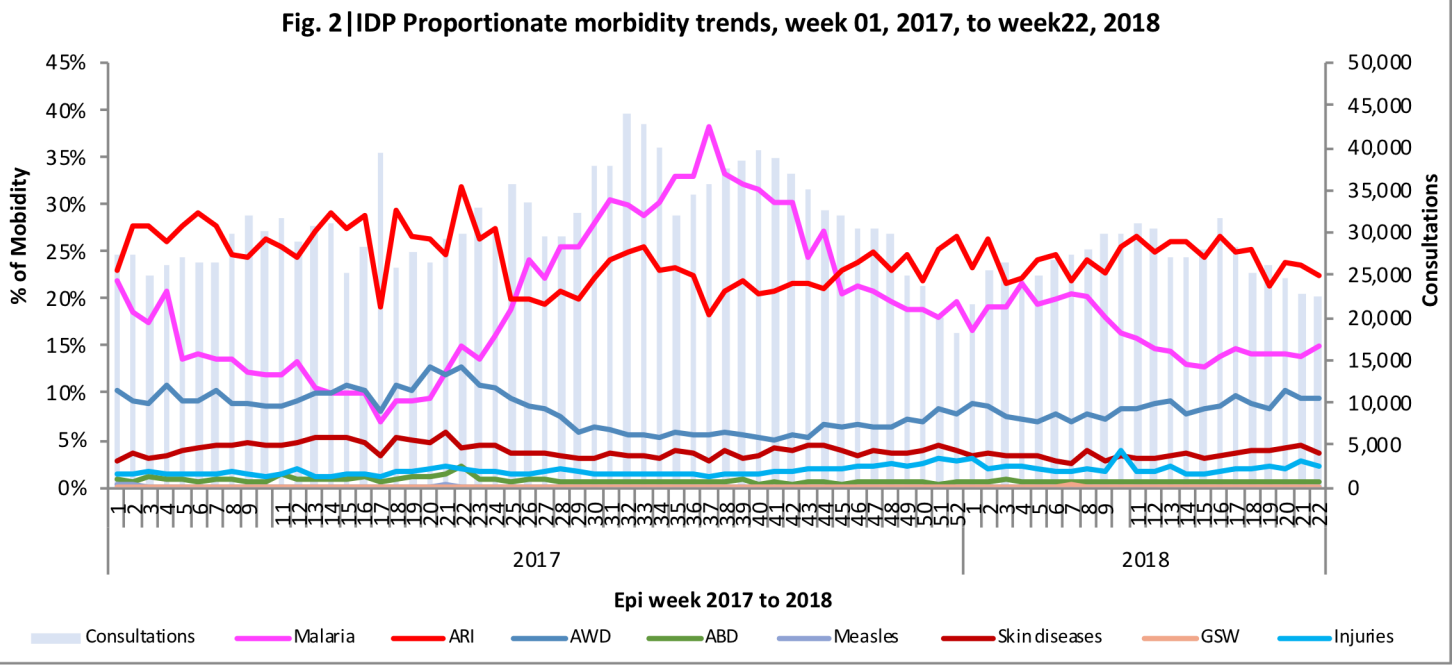
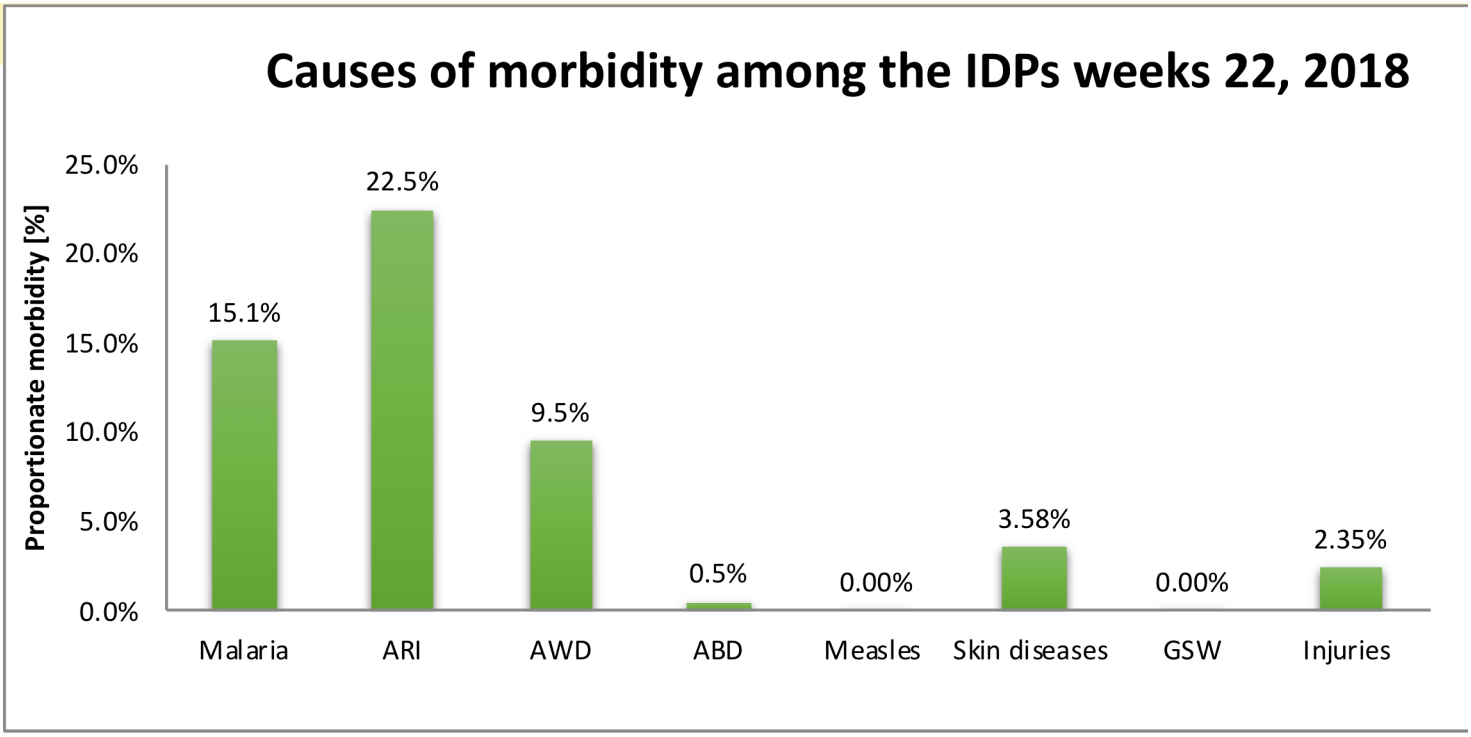


Among the IDPs, ARI and malaria accounted for 22.5% and 15.1% of consultations in week 22. The other significant causes of morbidity in the IDPs include AWD, skin diseases, and injuries.



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

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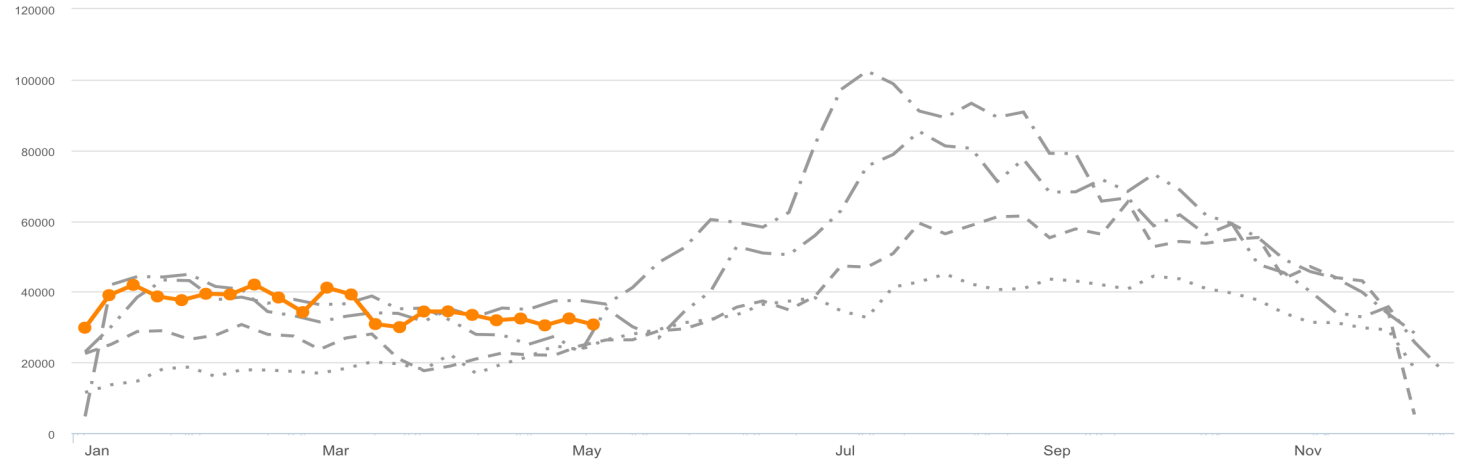
Malaria| Trends over time

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



Graph legend

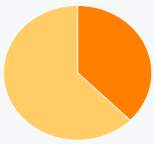
2018
2017
2016
2015
2014

Key malaria indicators (2018)

781,973	104	58
Cases	Deaths	Alerts

Figure 4b | % morbidity

Figure 4c | Age breakdown

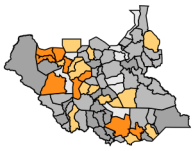


Malaria is the top course of Morbidity in the country, a total of 781,973 cases with 104 deaths registered since week 1 of 2018. malaria trend for week 22 of 2018 is above 2014, 2015, and 2016 however, it's below the trend for 2017 as shown in the figure 4a, above.

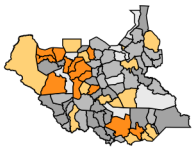
Malaria| Maps and Alert Management

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

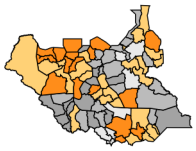
a. 2014



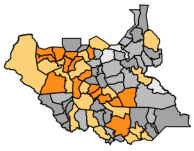
b. 2015



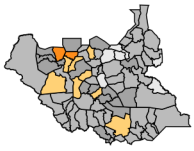
c. 2016



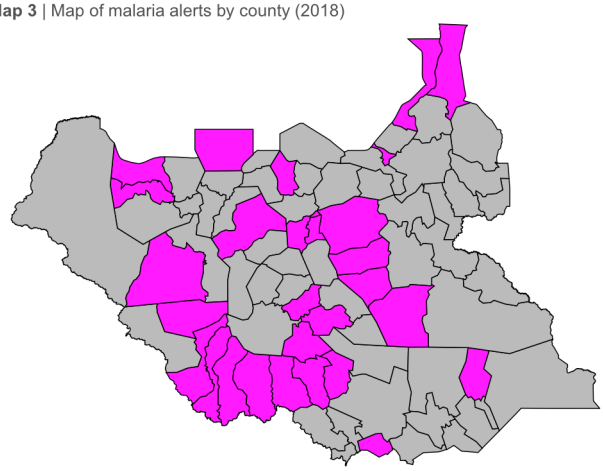
d. 2017



d. 2018



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



Map legend

Number of malaria cases

0 1 10,000 20,000 50,000

Number of malaria alerts

0 1 10

Alert threshold

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

58	35
Alerts	Verified

Risk Assessment

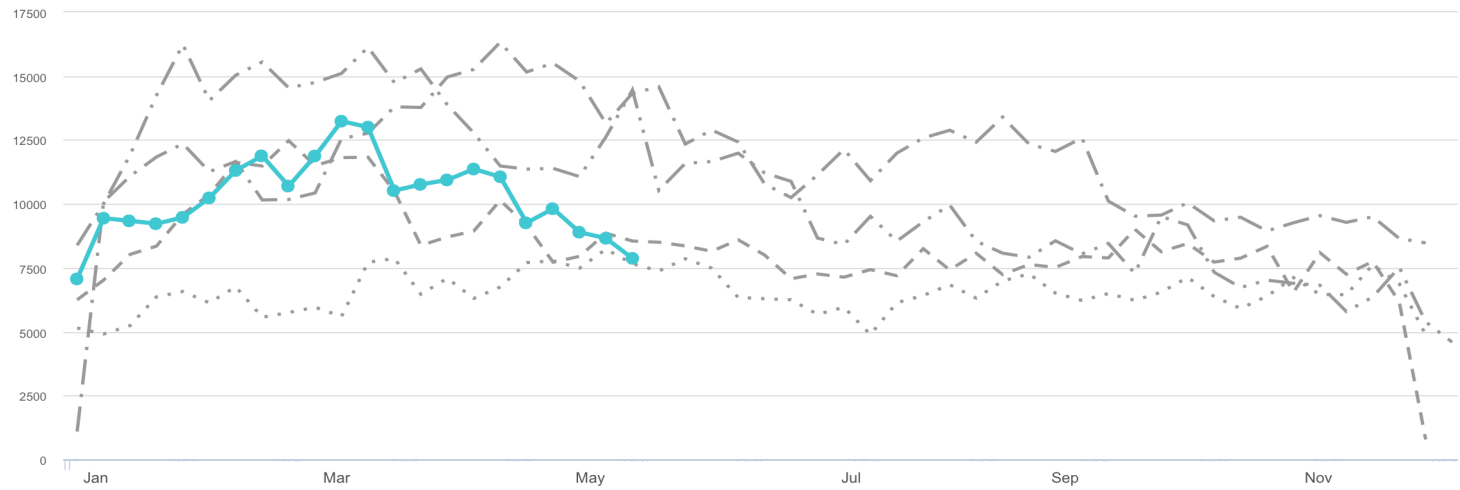
2	0	0	1
Low Risk	Moderate Risk	High Risk	Very High Risk

Since the beginning of the year, a total of 58 malaria alerts have been triggered, 35 of those were verified. The Maps above indicate the location reporting malaria alerts from 2014, 2015, 2016, 2017, and 2018.

World Health Organization South Sudan

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)

225,904	9	78
Cases	Deaths	Alerts

Figure 5b | % morbidity

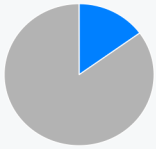


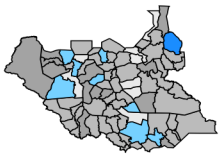
Figure 5c | Age breakdown

AWD is one of the top causes of morbidity in the country with 225,904 cases reported since week 1 of 2018 including 9 deaths. AWD trend for week 22 of 2018 is below 2014, 2015 & 2016 as shown in figure 5a, above.

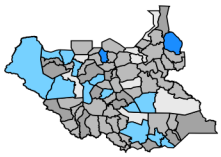
Acute Watery Diarrhoea| Maps and Alert Management

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

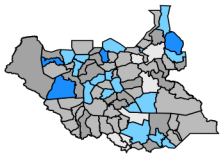
a. 2014



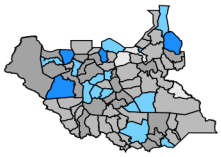
b. 2015



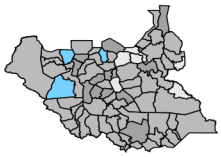
c. 2016



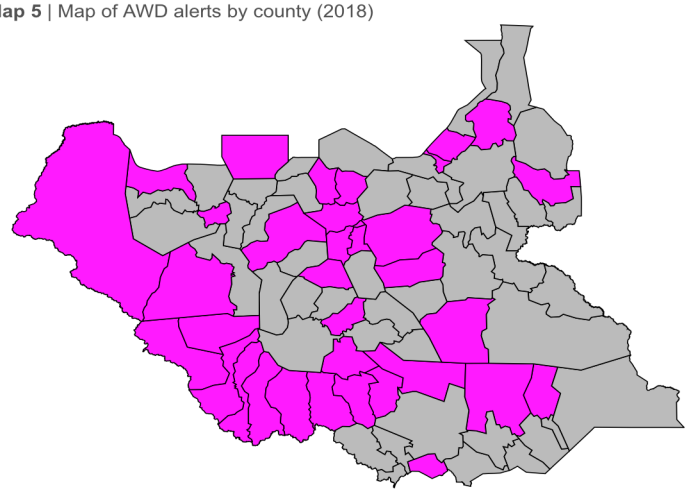
d. 2017



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*

78	50
Alerts	Verified

Risk Assessment

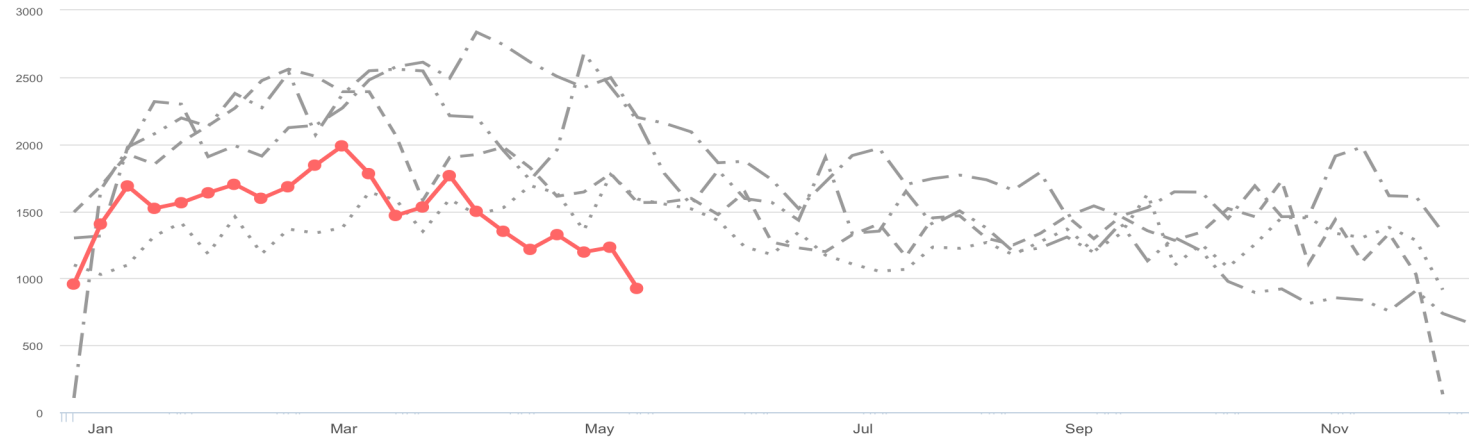
0	1	0	0
Low Risk	Moderate Risk	High Risk	Very High Risk

The number of AWD alerts triggered since week 1 of 2018 is 78, out of which 50 were verified. Maps above highlight the areas reporting AWD alerts from 2014 to 2018.

World Health Organization South Sudan

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)

32,882	14	90
Cases	Deaths	Alerts

Figure 6b | % morbidity

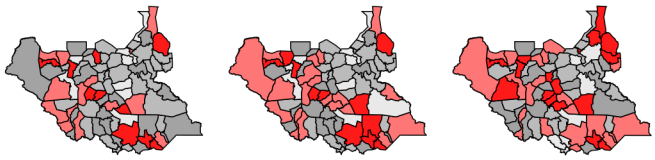
Figure 6c | Age breakdown

Since week 1 of 2018, a total of 32,882 cases of ABD have been reported country wide including 14 death. ABD trend for week 22 of 2018 is below 2014, 2015, 2016, and 2017 respectively. Refer to figure 6a, above.

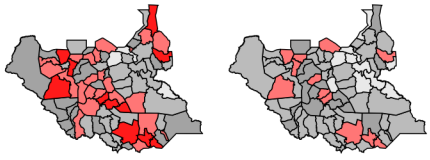
Acute Bloody Diarrhoea| Maps and Alert Management

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

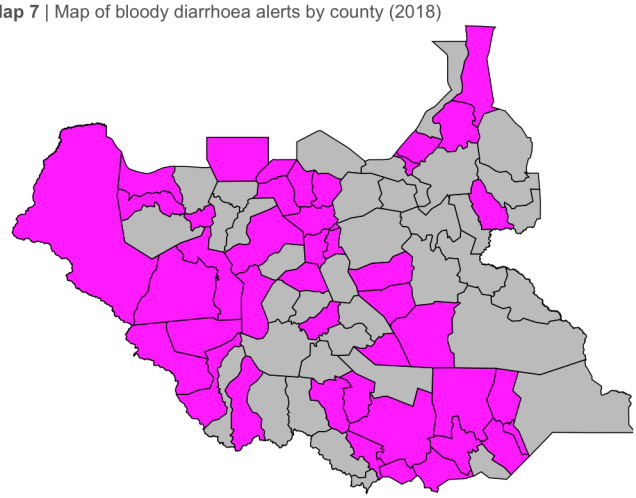
a. 2014 b. 2015 c. 2016



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*

90	55
Alerts	Verified

Risk Assessment

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

Total of 90 alerts were generated since week 1 of 2018, of which 55 were verified by the county surveillance team. Maps indicating areas triggering alerts since 2014 to 2018 are shown above.

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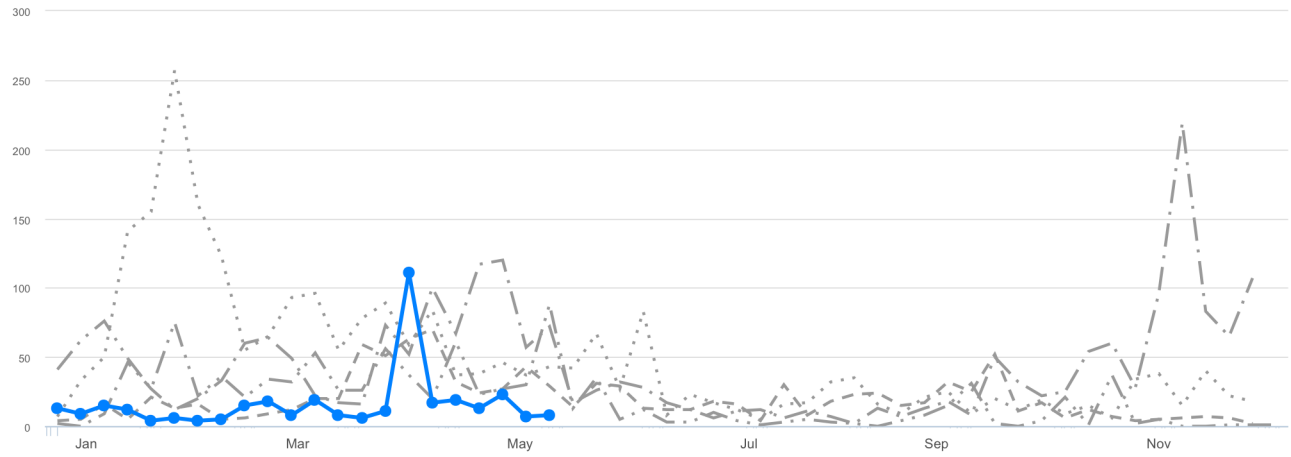
Measles| Trends over time

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



Graph legend

2018
2017
2016
2015
2014

Key measles indicators (2018)

351	3	65
Cases	Deaths	Alerts

Figure 7b | % morbidity

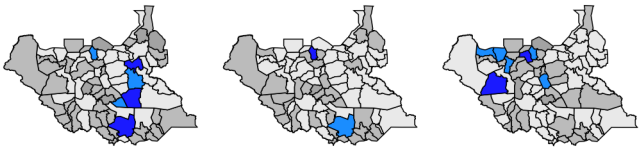
Figure 7c | Age breakdown

Since the beginning of 2018, at least 351 suspect measles cases including 3 death (CFR 0.85%) 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.

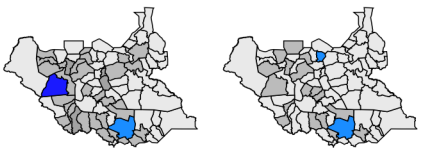
Measles| Maps and Alert Management

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

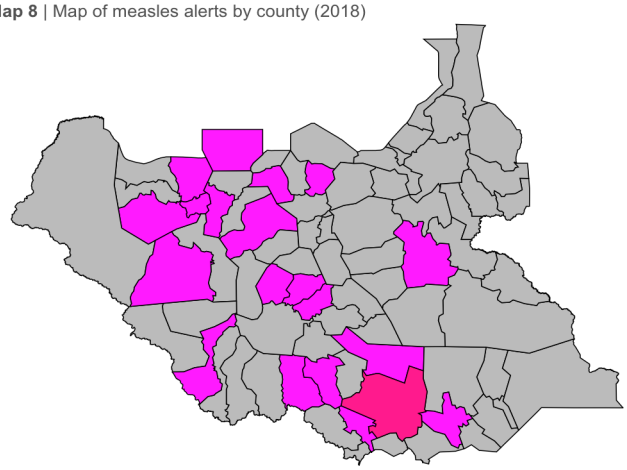
a. 2014 b. 2015 c. 2016



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

65	50
Alerts	Verified

Risk Assessment

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

Since week 1 of 2018, 65 alerts of measles were triggered and 50 of those have been verified at county level. Maps of areas raising alerts from 2014 to 2018 are shown above.

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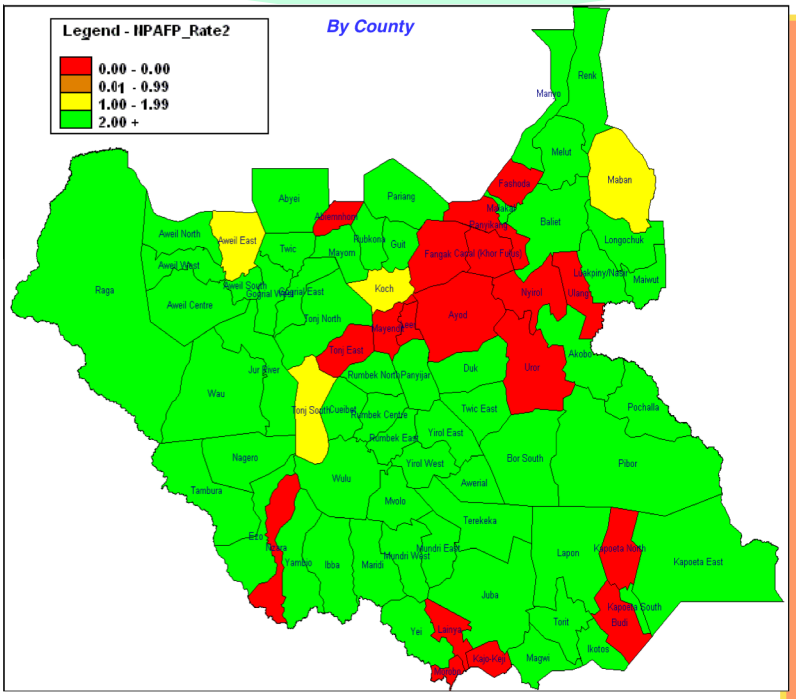
Acute Flaccid Paralysis| Suspected Polio



In week 22, 2018, Fourteen (14) new AFP cases were reported from Lakes, Unity, Western Equatoria, Upper Nile, Eastern Equatoria and Warrap hubs. This brings the cumulative total for 2018 to 182 AFP cases.

The annualized non-Polio AFP (NPAFP) rate (cases per 100,000 population children 0-14 years) in 2018 is 5.2 per 100,000 population of children 0-14 years (target ≥2 per 100,000 children 0-14 years).

Stool adequacy was 85% in 2018, a rate that is higher than the target of ≥80%.

Environmental surveillance ongoing since May 2017; with 23 samples testing positive for non-polio enterovirus (NPEV) in 2017 and seven (7) NPEV positive sample in 2018.

Source: South Sudan Weekly AFP Bulletin

Mortality in the IDPs

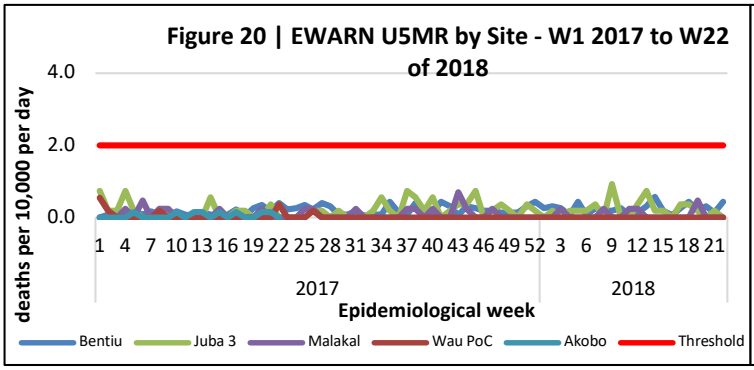
Table 6 | Proportional mortality by cause of death in IDPs W22 2018

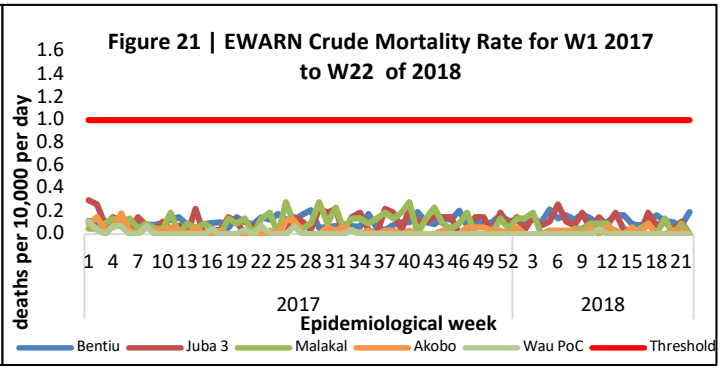
Cause of Death by IDP site	Bentiu		Total deaths
	<5yrs	≥5yrs	
perinatal death		1	1
pneumonia		2	2
Respiratory distress	1		1
SAM		1	1
Sepsis		1	1
TB/HIV/AIDS	1		1
HIV/AIDS	1		1
snake bite		1	1
Unkown	1	1	2
Hep B + Hepatic failure	1		1
Shigellosis + Renal Failure	1		1
Known Chronic Osteomyelitis	1		1
Mucus aspiration		1	1
Total deaths	**7**	**8**	**15**

Among the IDPs, mortality data was received from Bentiu PoC in week 22. (Table 6). **A total of 15** deaths were reported during the week. Bentiu PoC report 15 deaths (100%) in the week. During the week, 7 (47%) deaths were recorded among children <5 years in (Table 6).

The causes of death during week 22 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 22 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 22 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 W22, 2018

IDP site	acute watery diarrhoea	cancer	GSW	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	6	1	1	2	1	2	7	3	15	10	1	8	16	8	1	13	7	123	**225**
Juba 3	1	1			1		6			3		2		1		4	7	33	**59**
Malakal		1			3	1			1	1							2	17	**26**
Akobo				1		2	2			2		1	2	1	1			6	**18**
Wau PoC							1											0	**1**
Grand Total	**7**	**3**	**1**	**3**	**5**	**5**	**16**	**3**	**16**	**16**	**1**	**11**	**18**	**10**	**2**	**17**	**16**	**179**	**329**
Proportionate mortality [%]	2%	1%	0%	1%	2%	2%	5%	1%	5%	5%	0%	3%	5%	3%	1%	5%	5%	54%	100%

- A total of 329 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

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