

# South Sudan

## Integrated Disease Surveillance and Response (IDSR)

Annexes W5 2018 (Jan29 - Feb04)



**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

### Malaria

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Slide 7 **Malaria maps and alert management**

### Acute Watery Diarrhoea (AWD)

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Slide 9 **AWD maps and alert management**

### 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**

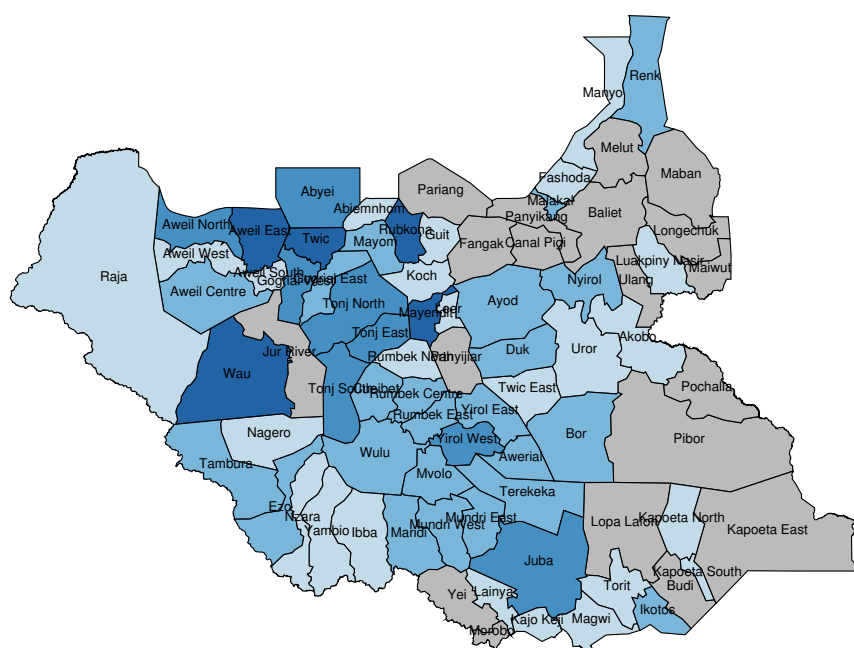
Slide 13 **Measles maps and alert management**

### 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 (W5 2018)

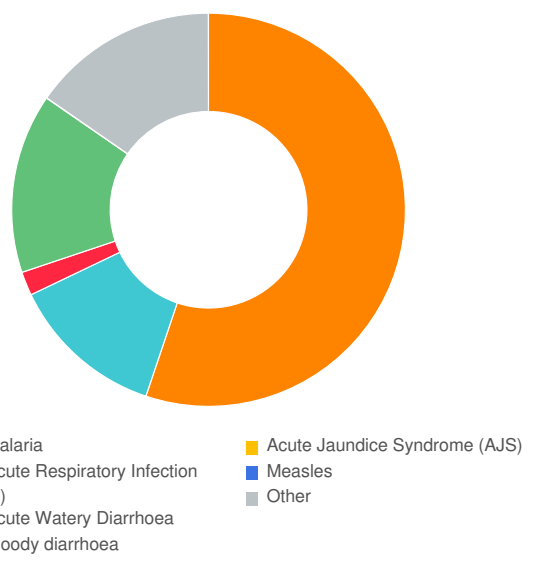


Hub	W5	2018
Aweil	16,002	86,759
Bentiu	16,403	61,374
Bor	8,837	52,060
Juba	5,726	45,010
Kwajok	26,413	108,852
Malakal	5,462	34,838
Rumbek	13,337	75,125
Torit	3,713	18,922
Wau	5,481	32,095
Yambio	11,988	
<b>South Sudan</b>	<b>113,362</b>	<b>572,000</b>

# Data under review

## Proportional morbidity

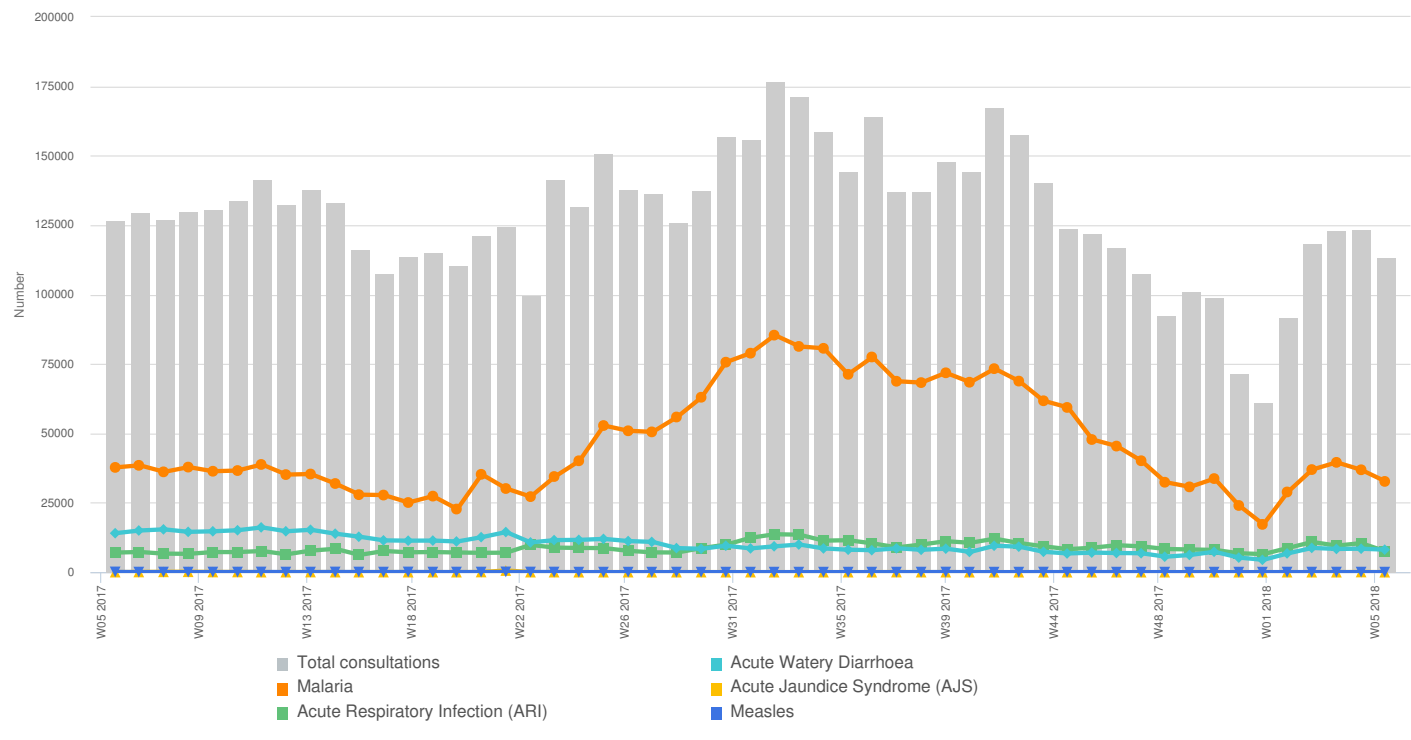
Figure 2 | Proportional morbidity (2018)



Syndrome	W5		2018	
	# cases	% morbidity	# cases	% morbidity
Malaria	32,683	55.9%	175,954	55.2%
ARI	7,517	12.8%	47,085	14.8%
AWD	8,106	13.9%	40,612	12.7%
Bloody diarrhoea	1,319	2.3%	6,285	2.0%
AJS	0	0.0%	58	0.0%
Measles	4	0.0%	53	0.0%
Other	8,885	15.2%	48,966	15.3%
<b>Total cases</b>	<b>58,514</b>	<b>100%</b>	<b>319,013</b>	<b>100%</b>

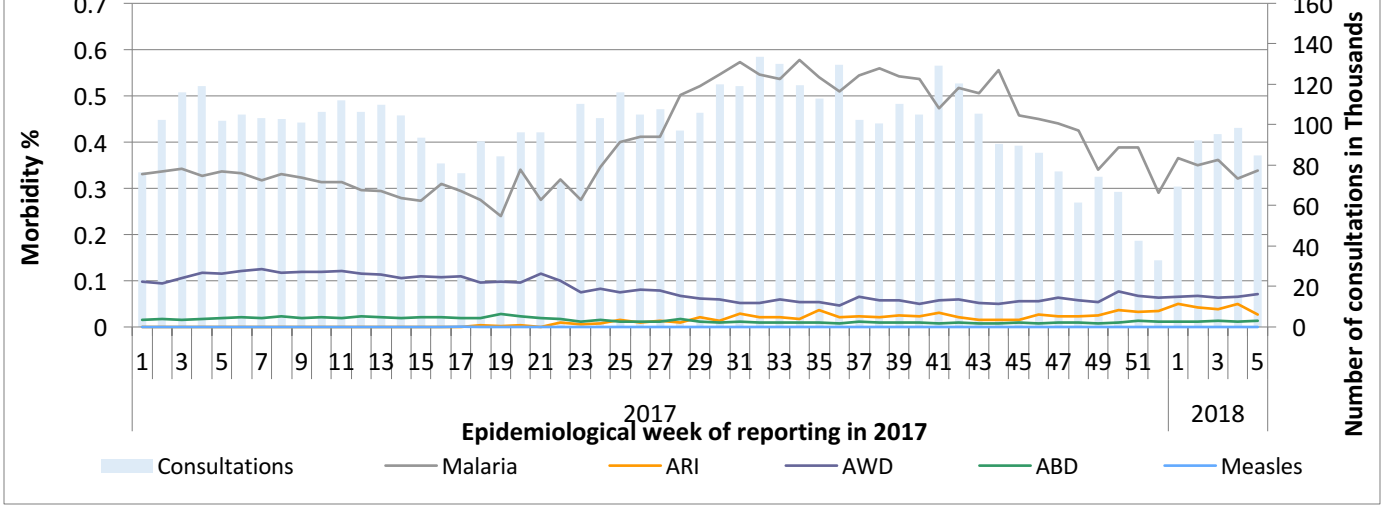
# Trend in consultations and key diseases

Figure 3 | Trend in total consultations and key diseases (W5)



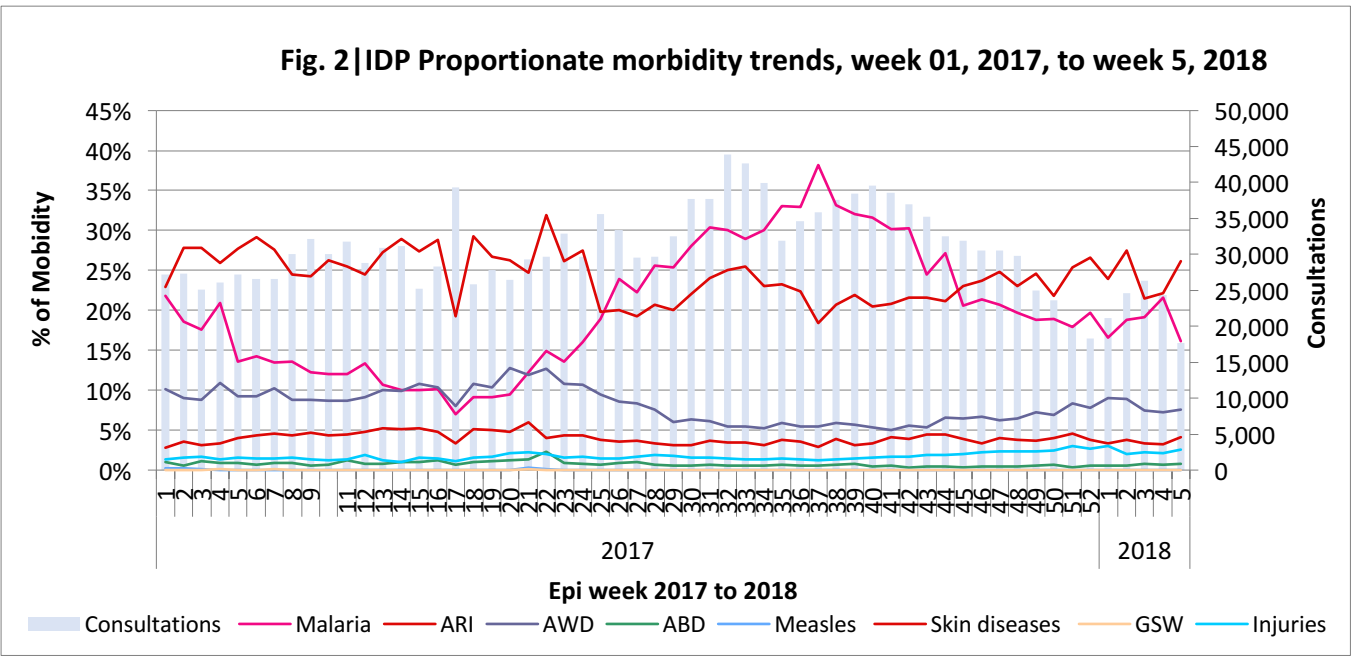
## IDSR Proportionate morbidity trends - in relatively stable states

Fig. 1 | IDSR Proportionate morbidity trends, week 1, 2017 to 5, 2018



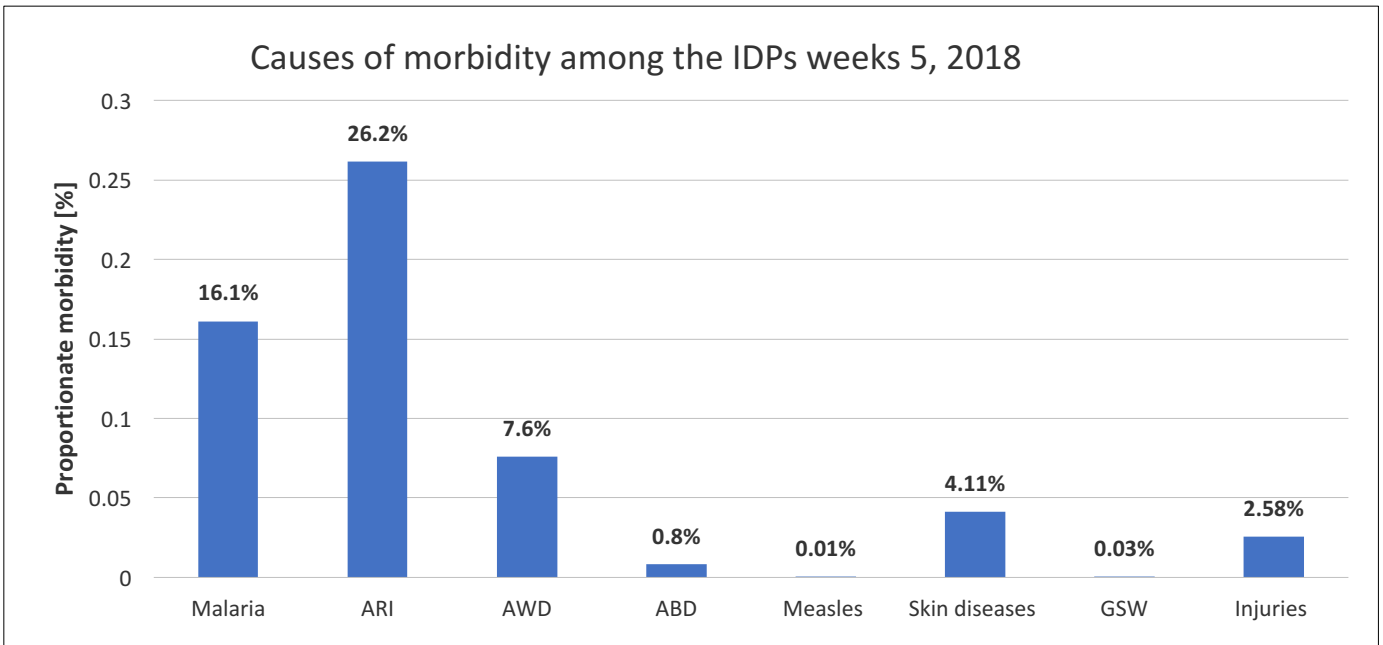
In the relatively stable states, malaria is the top cause of morbidity accounting for 33.9% of the consultations in week 5 (representing a decline from 36.5% in week 1).

Fig. 2 | IDP Proportionate morbidity trends, week 01, 2017, to week 5, 2018



Among the IDPs, ARI and malaria accounted for 26.2% and 16.1% of consultations in week 5. The other significant causes of morbidity in the IDPs include AWD, skin diseases, and injuries.

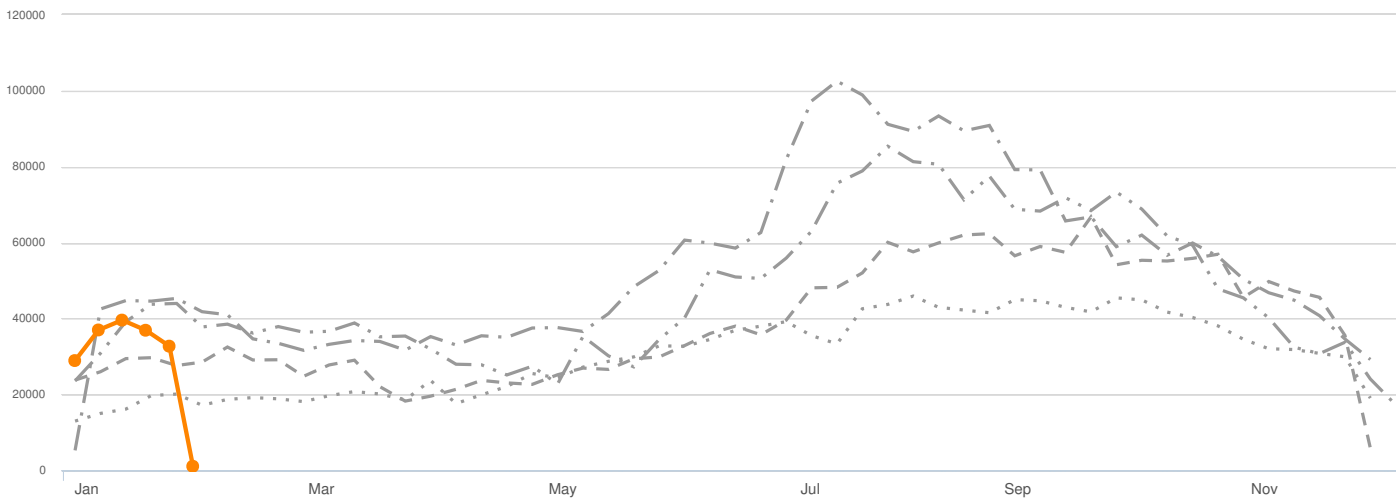
Causes of morbidity among the IDPs weeks 5, 2018



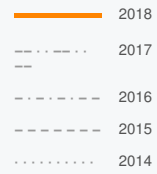
The top causes of morbidity in the IDPs in 2018 include ARI, malaria, AWD, skin diseases, injuries, and ABD.

# Malaria | Trends over time

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



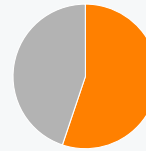
**Graph legend**



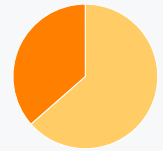
**Key malaria indicators (2018)**

**175,954** Cases  
**38** Deaths  
**10** Alerts

**Figure 4b** | % morbidity



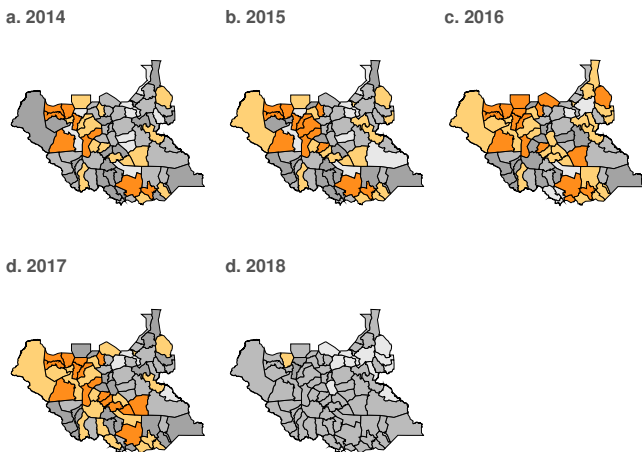
**Figure 4c** | Age breakdown



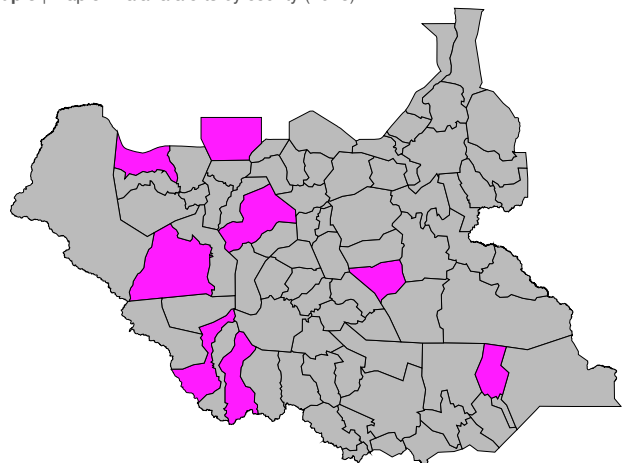
# Malaria | Maps and Alert Management

## 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**

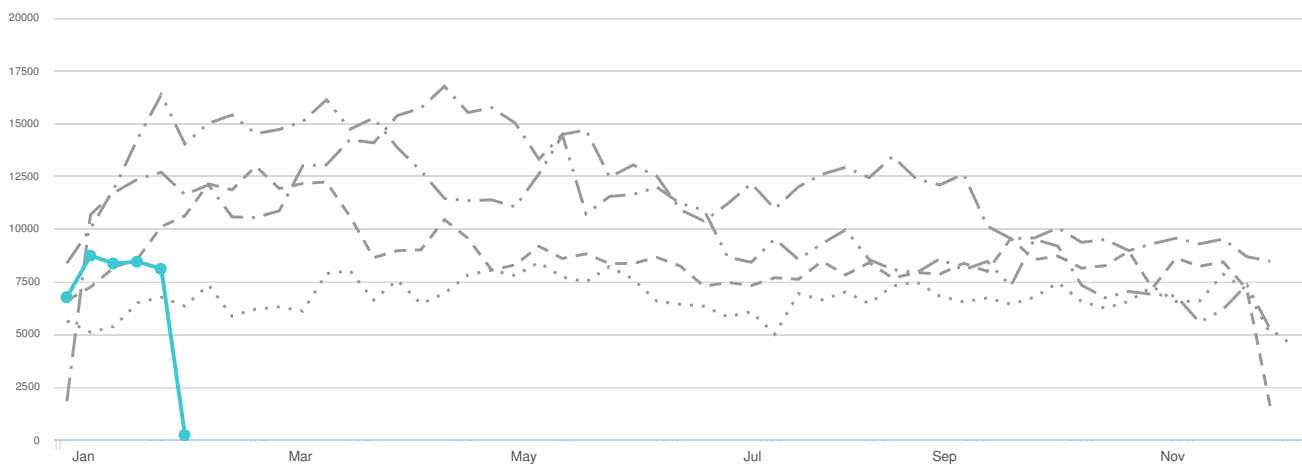
Twice the average number of cases over the past 3 weeks. Source: IDSR

**Risk Assessment**

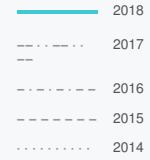


## Acute Watery Diarrhoea | Trends over time

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



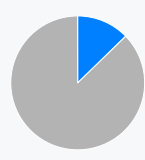
**Graph legend**



**Key AWD indicators (2018)**

**40,612** Cases  
**2** Deaths  
**19** Alerts

**Figure 5b | % morbidity**



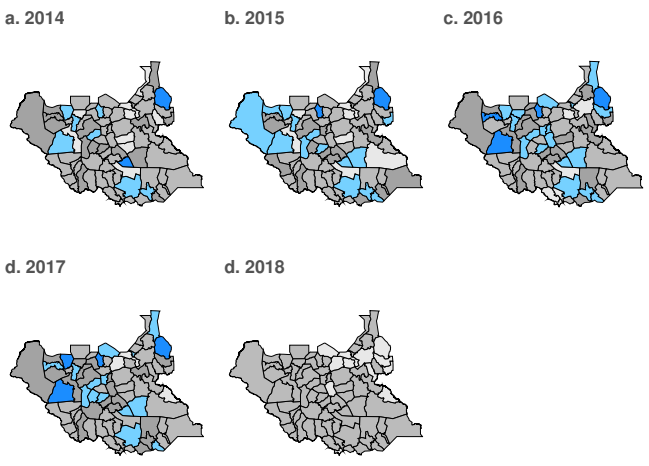
**Figure 5c | Age breakdown**



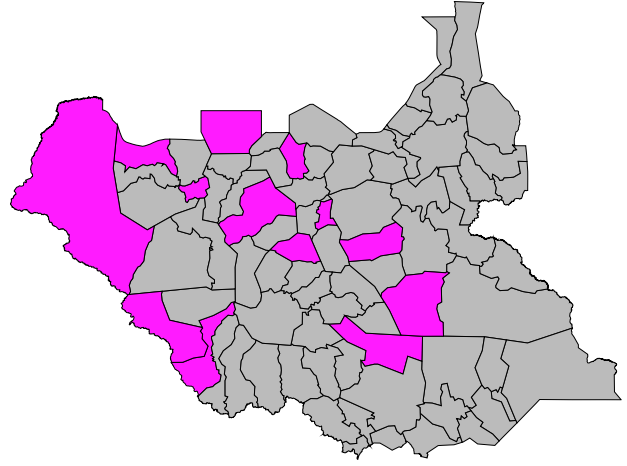
# Acute Watery Diarrhoea | Maps and Alert Management

## Acute Watery Diarrhoea | Maps and Alert Management

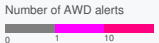
Map 4 | Map of AWD cases by county (2018)



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



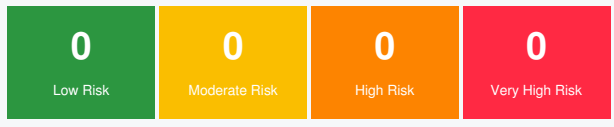
**Map legend**



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

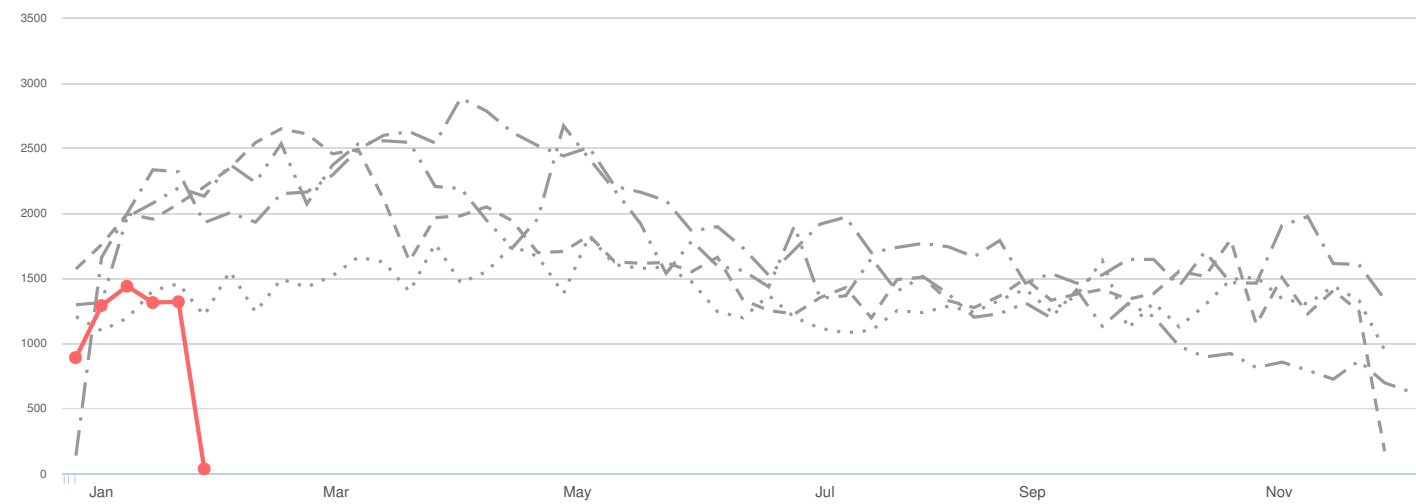
**19** Alerts  
**6** Verified

**Risk Assessment**



# Acute Bloody Diarrhoea | Trends over time

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



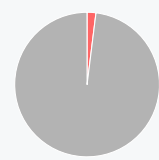
**Graph legend**

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

**Key bloody diarrhoea indicators (2018)**

**6,285** Cases  
**1** Deaths  
**28** Alerts

**Figure 6b** | % morbidity

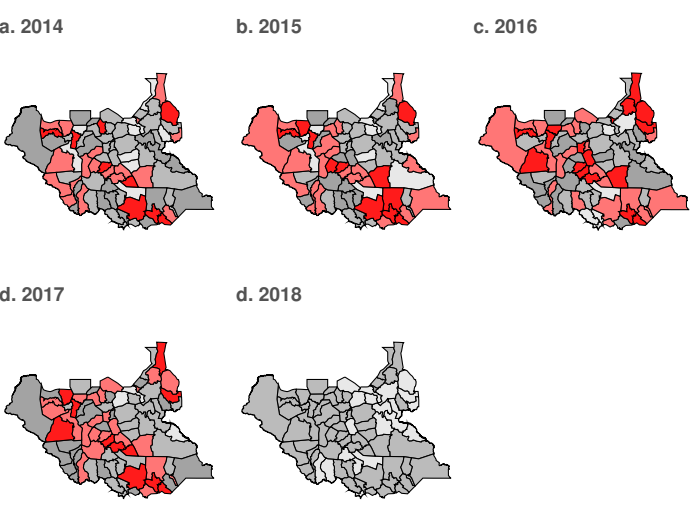


**Figure 6c** | Age breakdown

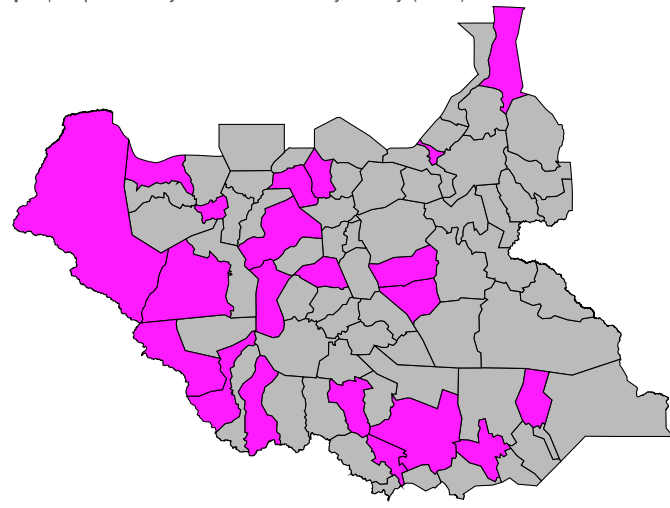


# Acute Bloody Diarrhoea | Maps and Alert Management

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



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



**Map legend**



**28** Alerts  
**5** Verified

**Risk Assessment**



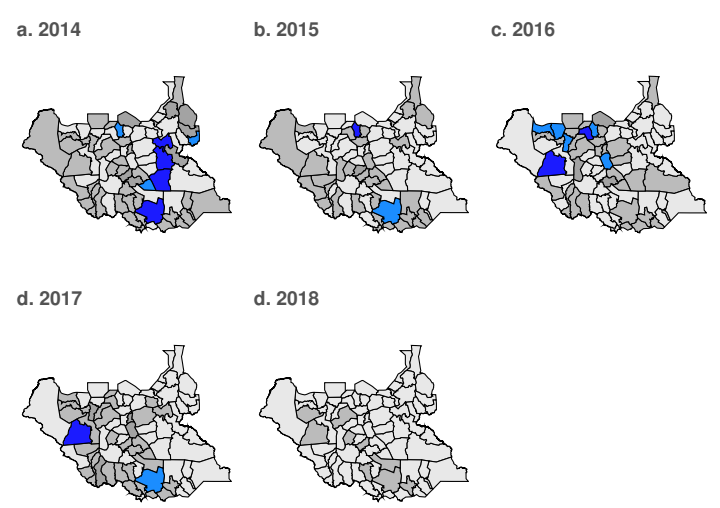
**Alert threshold**  
 Twice the average number of cases over the past 3 weeks. *Source: IDSR*



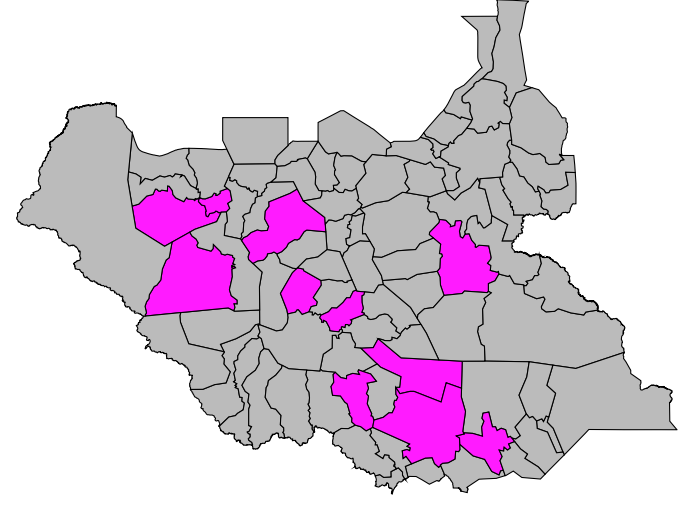
Data under review

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**

Number of measles cases  
 0 1 50 100 250

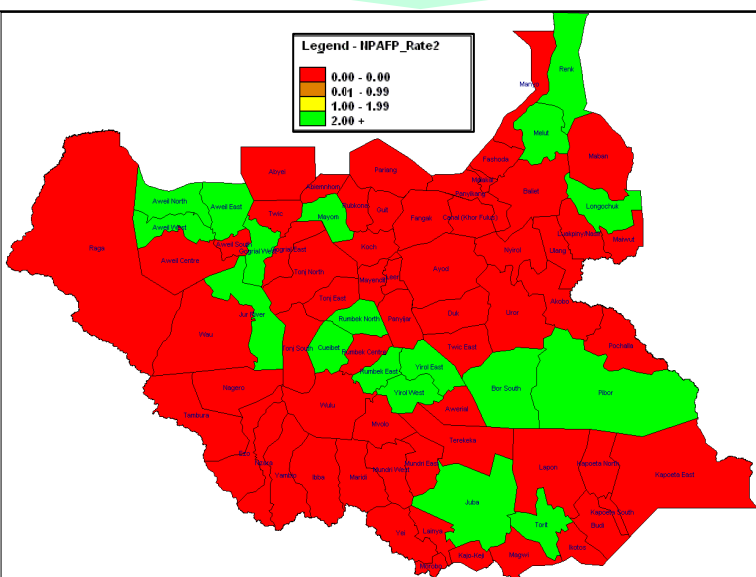
Number of measles alerts  
 0 1 10

**Alert threshold**  
 1 case.  
 Source: IDSR

**Risk Assessment**

<b>0</b> Low Risk	<b>0</b> Moderate Risk	<b>0</b> High Risk	<b>0</b> Very High Risk
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**17** Alerts      **7** Verified



In week 5, 2018, six new AFP cases were reported from Lakes and Upper Nile hubs. This brings the cumulative total for 2018 to 22 AFP cases.

The annualized non-Polio AFP (NPAFP) rate (cases per 100,000 population children 0-14 years) in 2018 was 2.78 per 100,000 population of children 0-14 years (target  $\geq 2$  per 100,000 children 0-14 years).

Stool adequacy was 95% 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.

**Source:** South Sudan Weekly AFP Bulletin

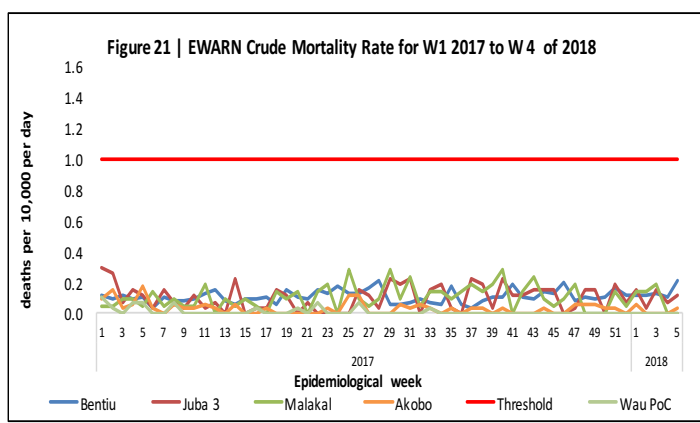
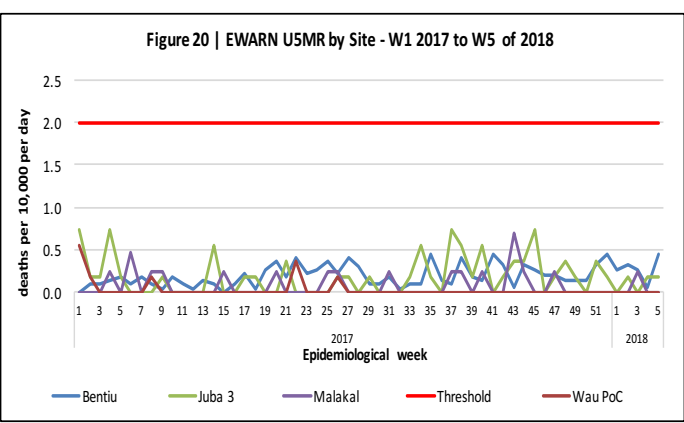
## Mortality in the IDPs

**Table 6 |** Proportional mortality by cause of death in IDPs W5 2018

Cause of Death by IDP site	Akobo	Bentiu		Juba 3		Total deaths	Proportionate mortality [%]
	<5yrs	<5yrs	$\geq 5$ yrs	<5yrs	$\geq 5$ yrs		
Asthma			1			1	5
Hypoxia		1				1	5
Kala-Azar			1			1	5
Malaria	1				1	2	10
Perinatal death		1				1	5
Pneumonia		1				1	5
Respiratory arrest		1				1	5
SAM				1		1	5
Shock					1	1	5
Unknown				3		3	14
TB			1			1	5
Burns		1				1	5
Heart failure +			1			1	5
Hypolycaemia			2			2	10
Susp TB		1				1	5
Suspect meningitis		1	1			2	10
<b>Total deaths</b>	<b>1</b>	<b>7</b>	<b>10</b>	<b>1</b>	<b>2</b>	<b>21</b>	<b>100</b>

Among the IDPs, mortality data was received from Akobo, Juba 3 PoC, Bentiu PoC in week 5. (Table 6). **A total of 21** deaths were reported during the week. Bentiu PoC reported 17 (81%) deaths in the week. During the week, 9 (43%) deaths were recorded among children <5 years in (Table 6).

The causes of death during week 5 are shown in Table 6.



The U5MR in all the IDP sites that submitted mortality data in week 5 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 5 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 W5, 2018

IDP site	acute watery diarrhoea	Asthma	cancer	Heart Failure	Kala-Azar	Liver Cirrhosis	malaria	Meningitis	perinatal death	pneumonia	Rabies	SAM	Sepsis	TB/HIV	Trauma	HIV/AIDS	TB	Susp TB	Suspect meningitis	Others	Grand Total
Bentiu		1	1	1	1		1	1	7	3	1	1	2	1		2	4	1	2	23	53
Juba 3	1	1	1			1	2			1		1				3	1			2	14
Malakal			1	2	1				1								2			3	10
Akobo					1		1								1					0	3
<b>Grand Total</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>1</b>	<b>4</b>	<b>1</b>	<b>8</b>	<b>4</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>5</b>	<b>7</b>	<b>1</b>	<b>2</b>	<b>28</b>	<b>80</b>
<b>Proportionate mortality [%]</b>	1%	3%	4%	4%	4%	1%	5%	1%	10%	5%	1%	3%	3%	1%	1%	6%	9%	1%	3%	35%	100%

- A total of 80 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>

