

South Sudan

Integrated Disease Surveillance and
Response (IDSR)

Annexes W33 2018 (Aug 13 – Aug 19)



**World Health
Organization**
South Sudan



Ministry of Health
Republic of South Sudan

Access and Utilisation

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Indicator-based surveillance

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Disease trends and maps

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Bloody diarrhoea

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

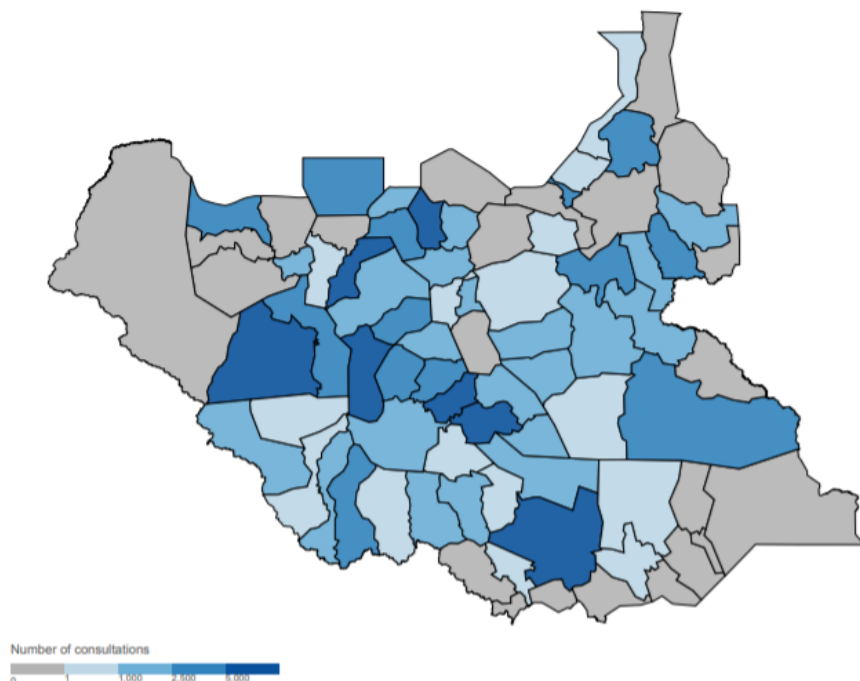
Slide 13 **Measles maps and alert management**

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 (W33 2018)

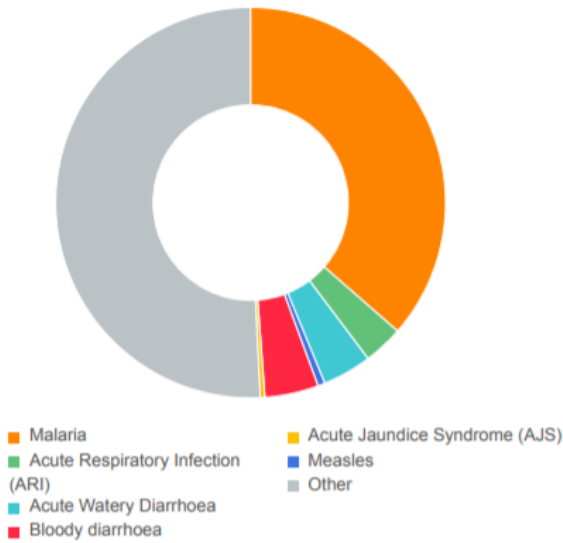


Hub	W33	2018
Aweil	4,803	400,796
Bentiu	19,725	515,936
Bor	13,532	366,678
Juba	11,479	387,373
Kwajok	22,355	830,643
Malakal	12,059	397,304
Rumbek	27,684	576,676
Torit	688	203,170
Wau	8,348	293,212
Yambio	11,337	377,051
South Sudan	132,010	4,348,839

The total consultation in the country since week 1 of 2018 is 4,348,839 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)

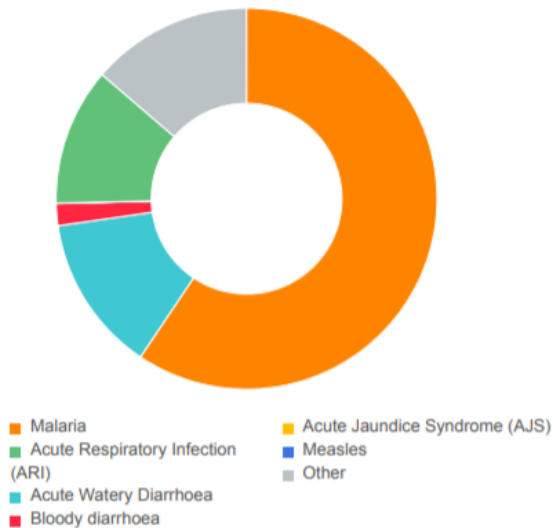


Syndrome	W33		2018	
	# deaths	% mortality	# deaths	% mortality
Malaria	7	100.0%	188	36.4%
ARI	0	0.0%	17	3.3%
AWD	0	0.0%	21	4.1%
Bloody diarrhoea	0	0.0%	23	4.5%
AJS	0	0.0%	2	0.4%
Measles	0	0.0%	3	0.6%
Other	0	0.0%	262	50.8%
Total deaths	7	100%	516	100%

Figure 1, above shows the proportional mortality for 2018, with malaria being the main cause of mortality accounting for 36.4% of the deaths since week 1 of 2018, followed by bloody diarrhoea, and acute watery diarrhoea.

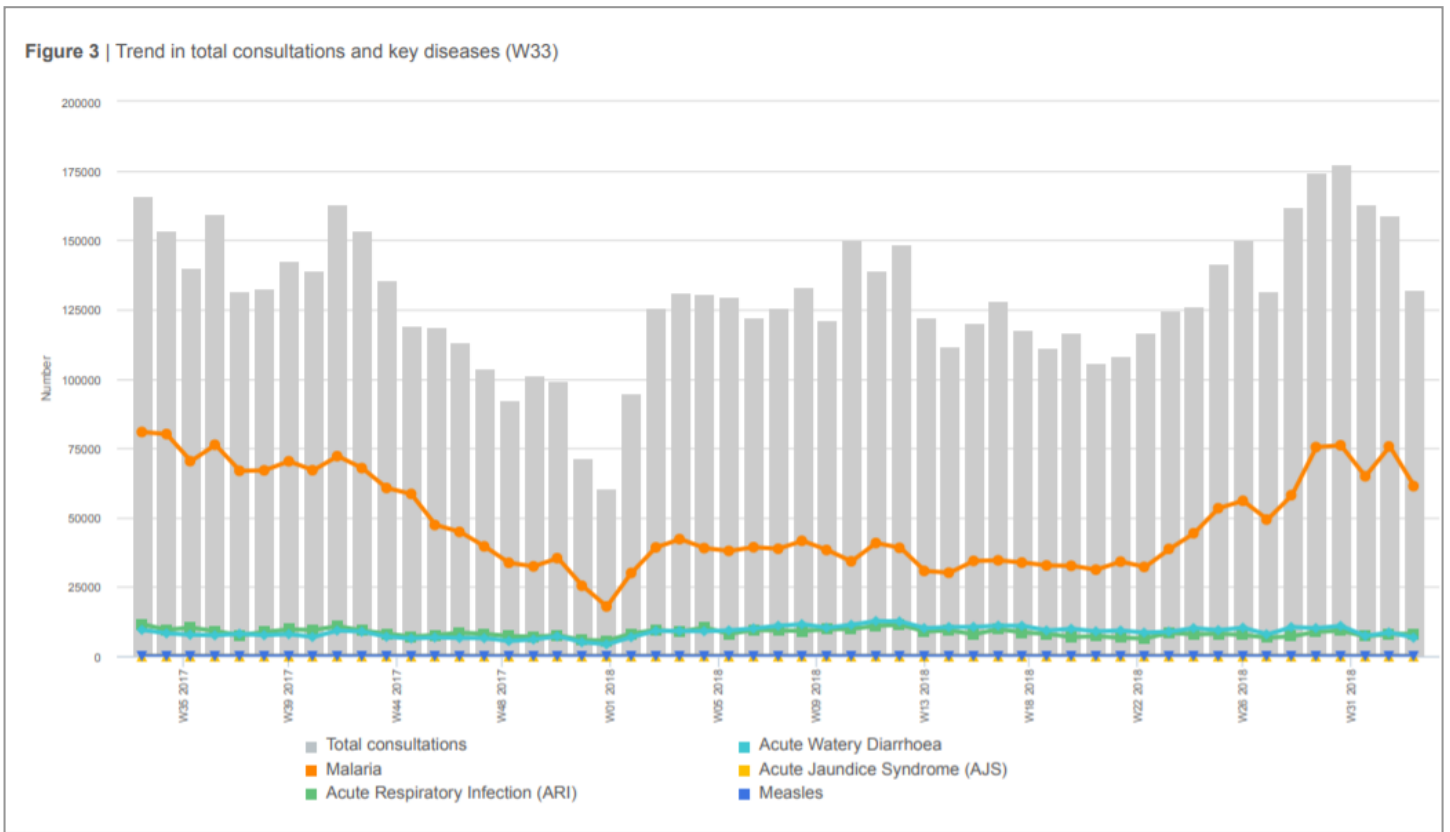
Proportional morbidity

Figure 2 | Proportional morbidity (2018)

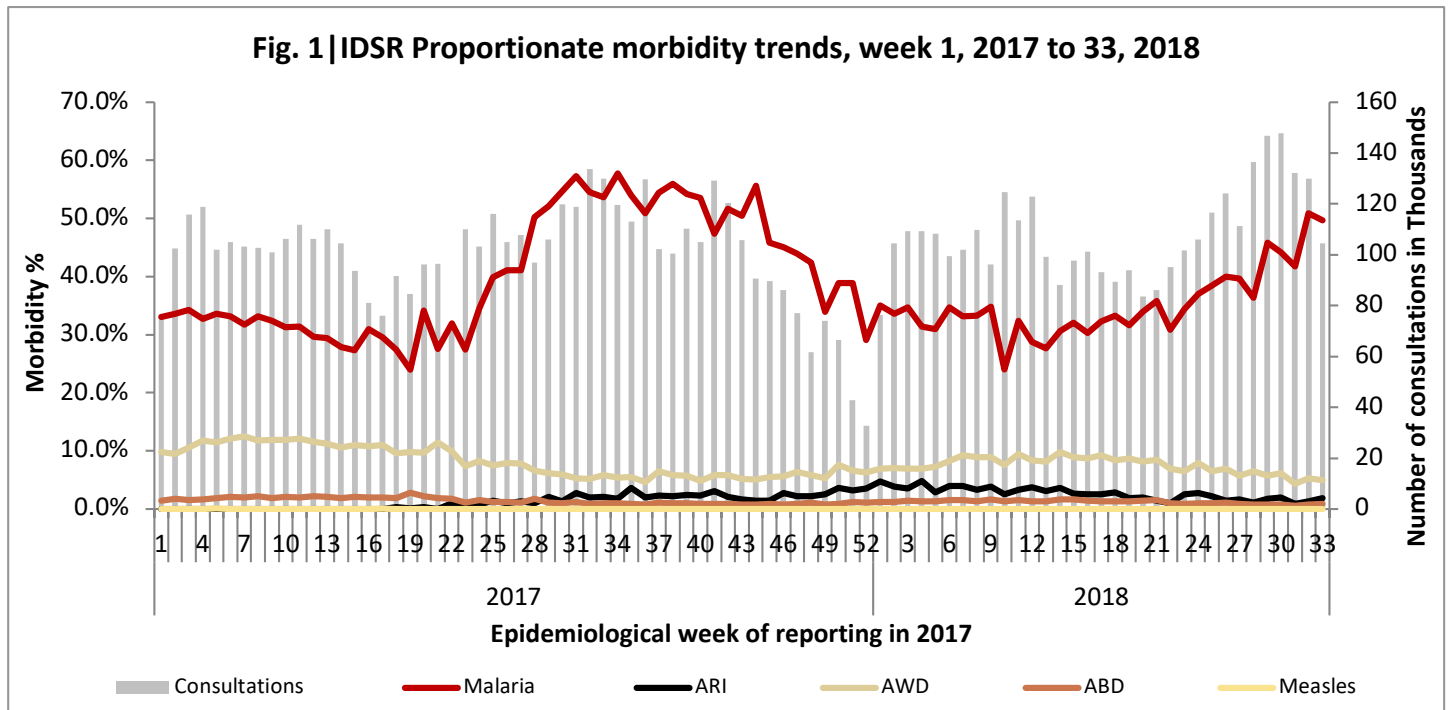


Syndrome	W33		2018	
	# cases	% morbidity	# cases	% morbidity
Malaria	61,334	71.6%	1,440,201	59.4%
ARI	8,116	9.5%	282,562	11.7%
AWD	6,739	7.9%	323,125	13.3%
Bloody diarrhoea	952	1.1%	45,439	1.9%
AJS	4	0.0%	188	0.0%
Measles	2	0.0%	386	0.0%
Other	8,477	9.9%	332,545	13.7%
Total cases	85,624	100%	2,424,446	100%

Figure 2, indicates the top causes of morbidity in the country, with malaria being the leading cause of morbidity 1,440,201 (59.4%) followed by ARI, AWD and ABD respectively since week 1 of 2018. refer to the figure above for more information.

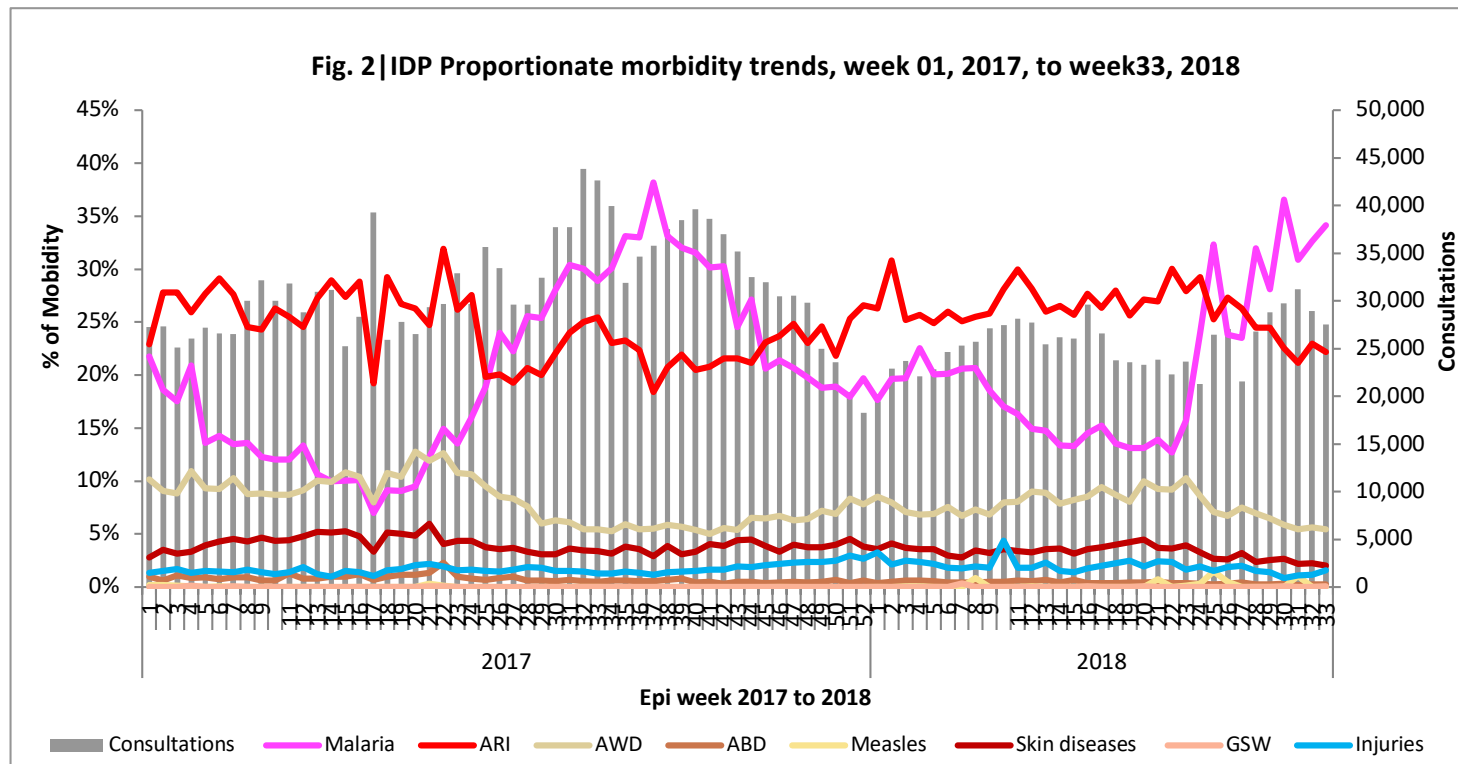


IDSR Proportionate morbidity trends - in relatively stable states



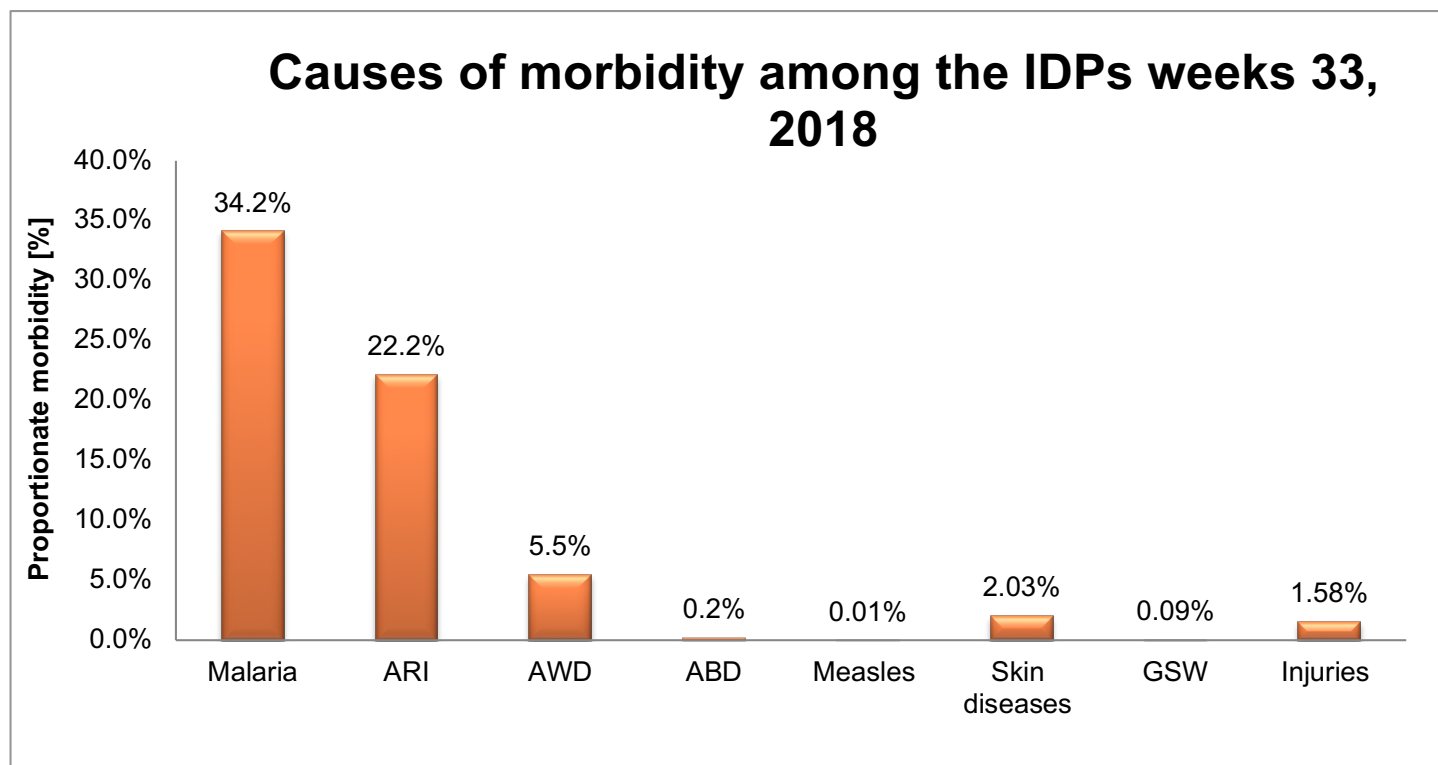
In the relatively stable states, malaria is the top cause of morbidity accounting for 49.7% of the consultations in week 33 (representing an decrease from 50.9% in week 32).

IDP Proportionate morbidity trends - in displaced population



Among the IDPs, Malaria and ARI accounted for 34.2% and 22.2% of the consultations in week 33. The other significant causes of morbidity in the IDPs includes AWD, Skin diseases, and Injuries.

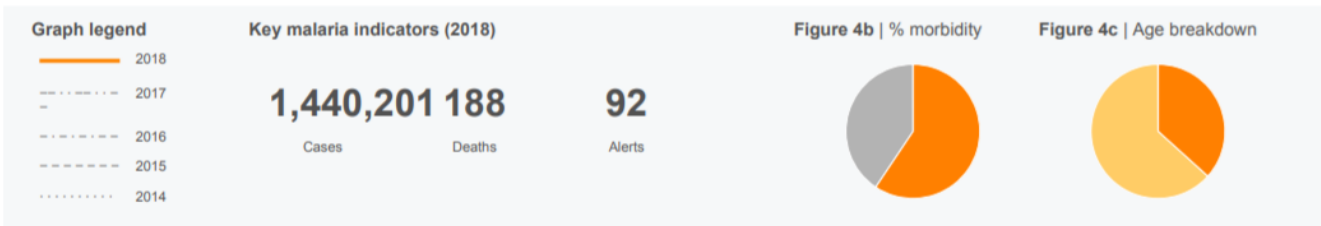
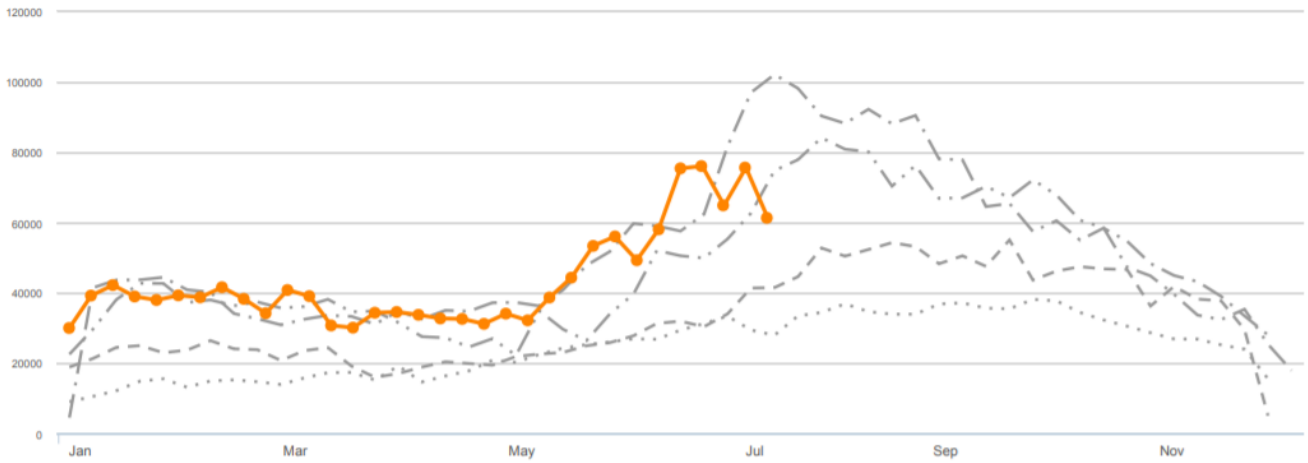
IDSR Proportionate morbidity trends - in displaced population



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

Malaria | Trends over time

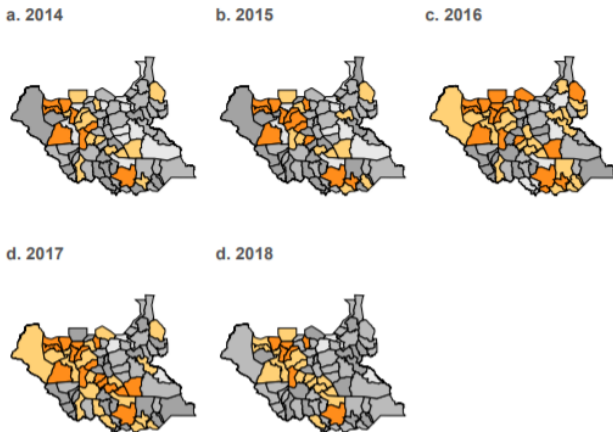
Figure 4a | Trend in number of cases over time (South Sudan)



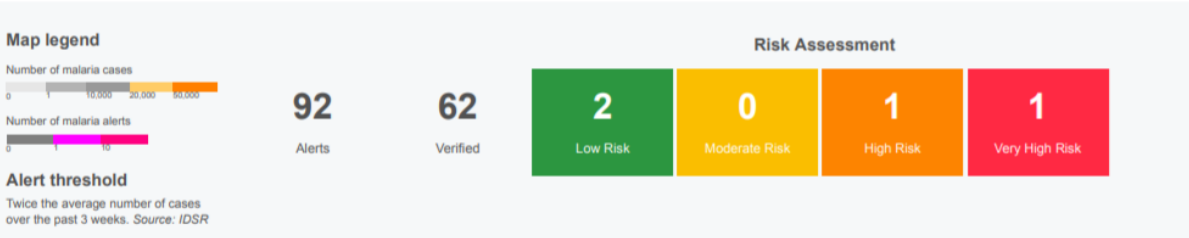
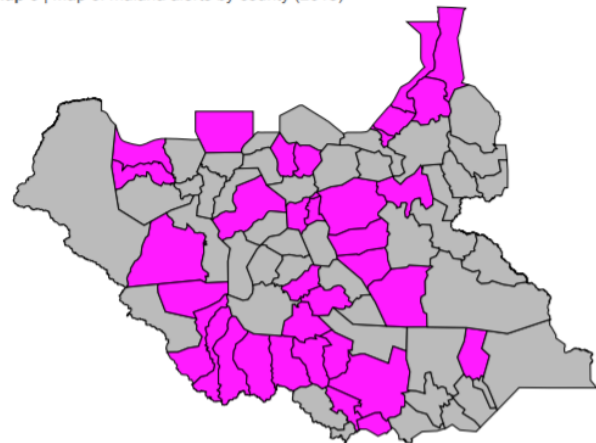
Malaria is the top course of Morbidity in the country, a total of 1,440,201 cases with 188 deaths registered since week 1 of 2018. malaria trend for week 33 of 2018 is above 2014, and 2015 as shown in the figure 4a, above.

Malaria | Maps and Alert Management

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



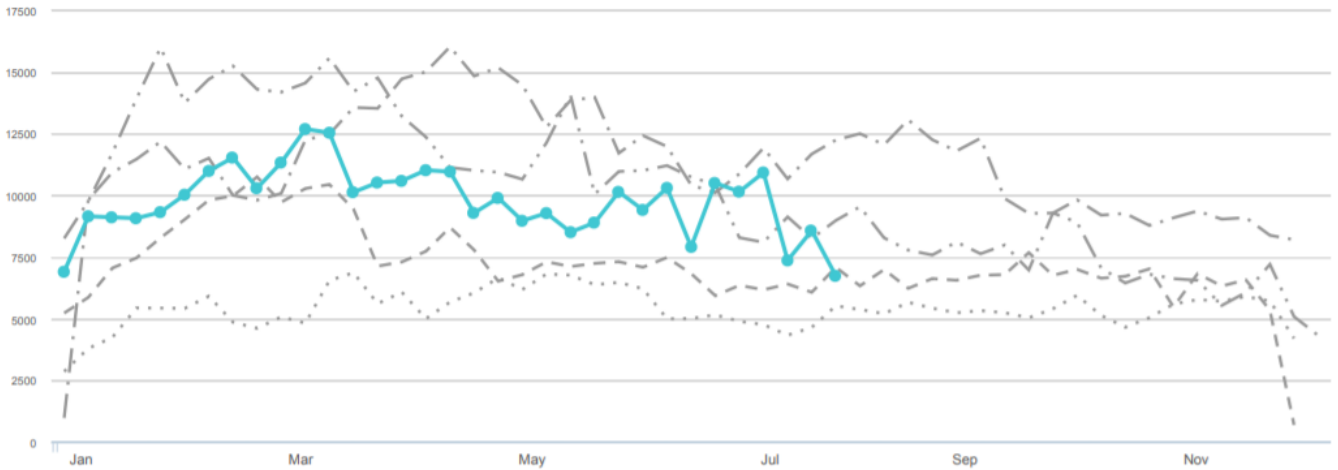
Map 3 | Map of malaria alerts by county (2018)



Since the beginning of the year, a total of 92 malaria alerts have been triggered, 62 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)

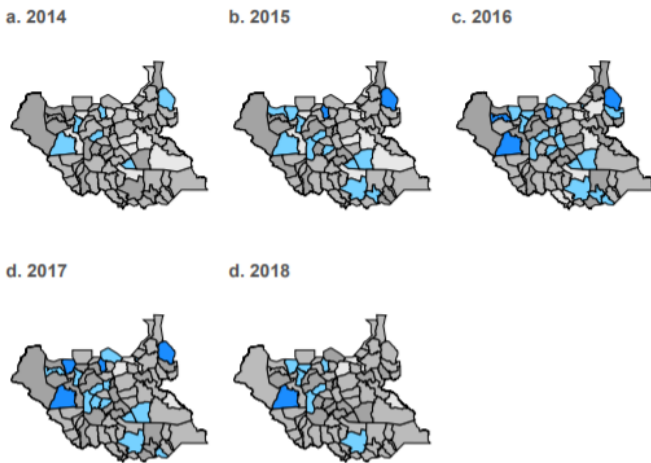


<p>Graph legend</p> <ul style="list-style-type: none"> —●— 2018 - - - - 2017 - · - · 2016 - - - - 2015 ····· 2014 	<p>Key AWD indicators (2018)</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <p>323,125</p> <p>Cases</p> </div> <div style="text-align: center;"> <p>21</p> <p>Deaths</p> </div> <div style="text-align: center;"> <p>89</p> <p>Alerts</p> </div> </div>	<p>Figure 5b % morbidity</p>	<p>Figure 5c Age breakdown</p>
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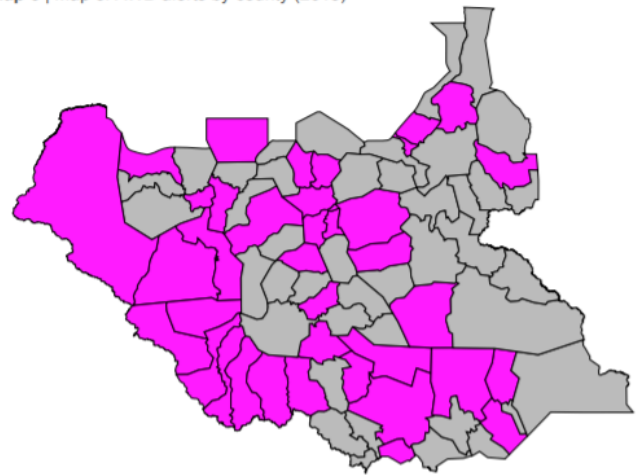
AWD is one of the top causes of morbidity in the country with 323,125 cases reported since week 1 of 2018 including 21 deaths. AWD trend for week 33 of 2018, is below 2015, 2016 and 2017, as shown in figure 5a, above.

Acute Watery Diarrhoea | Maps and Alert Management

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



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

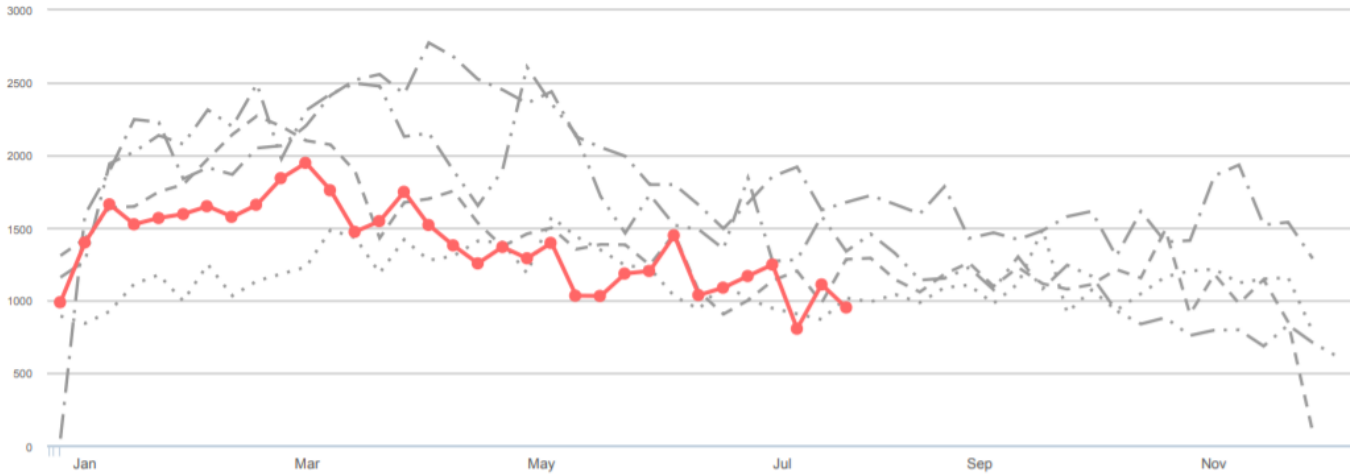


<p>Map legend</p> <p>Number of AWD cases</p> <p>Number of AWD alerts</p> <p>Alert threshold Twice the average number of cases over the past 3 weeks. Source: IDSR</p>	<p>89</p> <p>Alerts</p>	<p>63</p> <p>Verified</p>	<p>Risk Assessment</p> <div style="display: flex; justify-content: space-around;"> <div style="background-color: #2e8b57; color: white; padding: 5px; text-align: center;"> <p>0</p> <p>Low Risk</p> </div> <div style="background-color: #ffd700; color: black; padding: 5px; text-align: center;"> <p>0</p> <p>Moderate Risk</p> </div> <div style="background-color: #ff8c00; color: white; padding: 5px; text-align: center;"> <p>0</p> <p>High Risk</p> </div> <div style="background-color: #ff0000; color: white; padding: 5px; text-align: center;"> <p>0</p> <p>Very High Risk</p> </div> </div>			
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The number of AWD alerts triggered since week 1 of 2018 is 89, out of which 63 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)



Graph legend

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

Key bloody diarrhoea indicators (2018)

45,439

Cases

23

Deaths

123

Alerts

Figure 6b | % morbidity

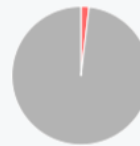


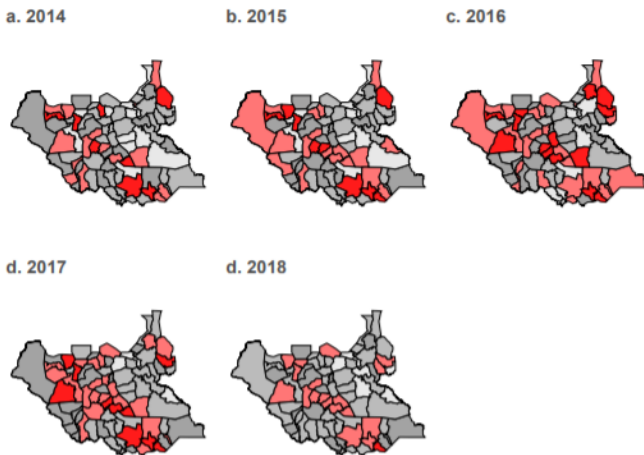
Figure 6c | Age breakdown



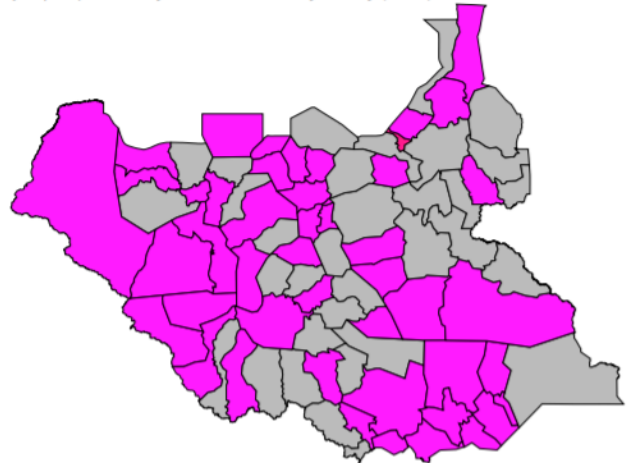
Since week 1 of 2018, a total of 45,439 cases of ABD have been reported country wide including 23 death. ABD trend for 2018 is below 2014, 2015, 2016, and 2017 respectively. Refer to figure 6a, above.

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)



Map legend



Alert threshold

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

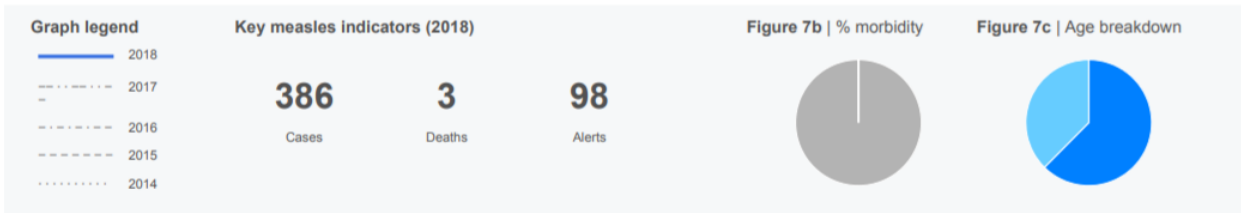
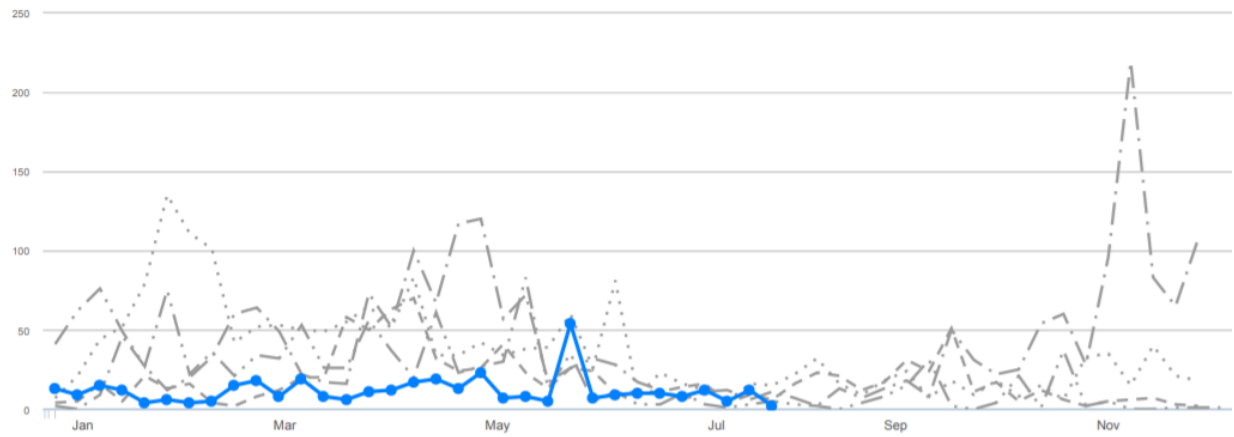
Risk Assessment



Total of 123 alerts were generated since week 1 of 2018, of which 80 were verified by the county surveillance team. Maps indicating areas triggering alerts since 2014 to 2018 are shown above.

Measles | Trends over time

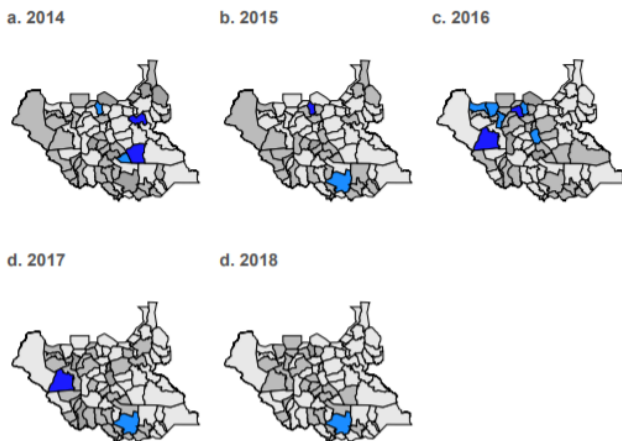
Figure 7a | Trend in number of cases over time (South Sudan)



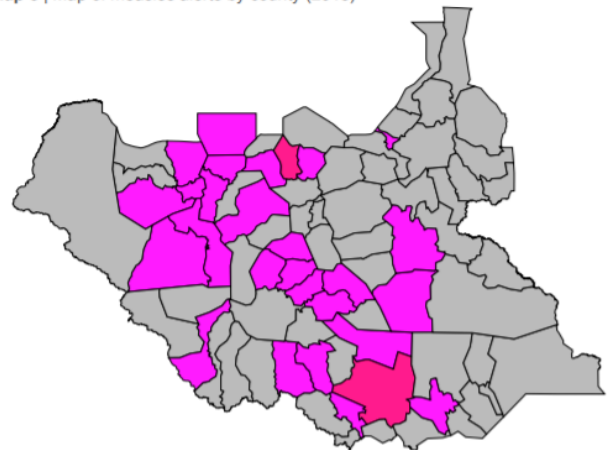
Since the beginning of 2018, at least 386 suspect measles cases including 3 death (CFR 0.82%) have been reported. Of these, 282 suspect cases have undergone measles case-based laboratory-backed investigation with 235 samples collected out of which 26 measles IgM positive cases; 57 clinically confirmed cases; and 3 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)



Since week 1 of 2018, 98 alerts of measles were triggered and 78 of those have been verified at county level. Maps of areas raising alerts from 2014 to 2018 are shown above.

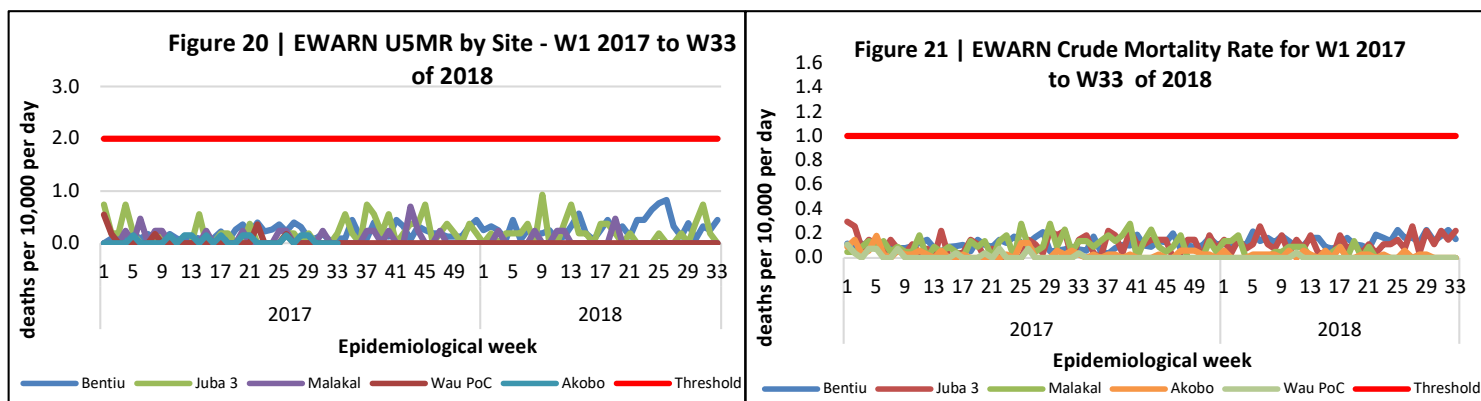
Table 6 | Proportional mortality by cause of death in IDPs W33 2018

Cause of Death by IDP site	Bentiu		Juba 3	Total deaths
	<5yrs	≥5yrs	≥5yrs	
Aspiration	1			1
cardiac arrest		1		1
malaria	1		1	2
perinatal death	1			1
SAM		1		1
TB			1	1
Unkown		1	1	2
Respiratory Distress.	1			1
Spina bifida	1			1
Haemoptysis		1		1
Hypoxic Ischemic Encephalopathy (HIE)	1			1
Chronic Obstructive Pulmonary Disease (COPD)		1		1
Nephroblastoma	1			1
Hepatitis B			1	1
Wasting Sydrum			1	1
Gastro-enteritis			1	1
Total deaths	7	5	6	18

Among the IDPs, mortality data was received from Bentiu PoC & UN House PoC in week 33. (Table 6). **A total of 18** deaths were reported during the week. Bentiu PoC report 12 deaths (67%) in the week. During the week, 5 (28%) deaths were recorded among children <5 years in (Table 6).

The causes of death during week 33 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 33 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 33 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 W33, 2018

IDP site	acute watery diarrhoea	cancer	Gungahat	wound	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	2	2	1	2	33	3	26	10	1	16	17	13	1	19	7	215	376
Juba 3	1	1			5		11			5		3		1		6	7	65	105
Malakal		1			3	1			1	1							2	17	26
Akobo				1		2	4			2		1	2	1	1			9	23
Wau PoC							1											0	1
Grand Total	8	3	2	3	9	5	49	3	27	18	1	20	19	15	2	25	16	306	531
Proportionate mortality [%]	2%	1%	0%	1%	2%	1%	9%	1%	5%	3%	0%	4%	4%	3%	0%	5%	3%	58%	100%

A total of 531 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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Technical support from WHO**

**For more help and support,
please contact:**

Dr. Pinyi Nyimol Mawien
Director General Preventive Health Services
Ministry of Health
Republic of South Sudan
Telephone: +211916285676

Dr. Mathew Tut Moses
Director Emergency Preparedness and Response (EPR)
Ministry of Health
Republic of South Sudan
Telephone: +211922202028

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>

