

South Sudan

Integrated Disease Surveillance and Response (IDSR)

Annexes W09 2019 (Feb 25 – March 3)

Access and Utilisation

Slide 2 **Map 1** Map of consultations by county (2019)

Indicator-based surveillance

Slide 3 **Figure 1** Proportional mortality

Slide 4 **Figure 2** Proportional morbidity

Slide 5 **Figure 3** Trend in consultations and key diseases

Disease trends and maps

Malaria

Slide 6 **Trend in malaria cases over time**

Slide 7 **Malaria maps and alert management**

Acute Watery Diarrhoea (AWD)

Slide 8 **Trend in AWD cases over time**

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**

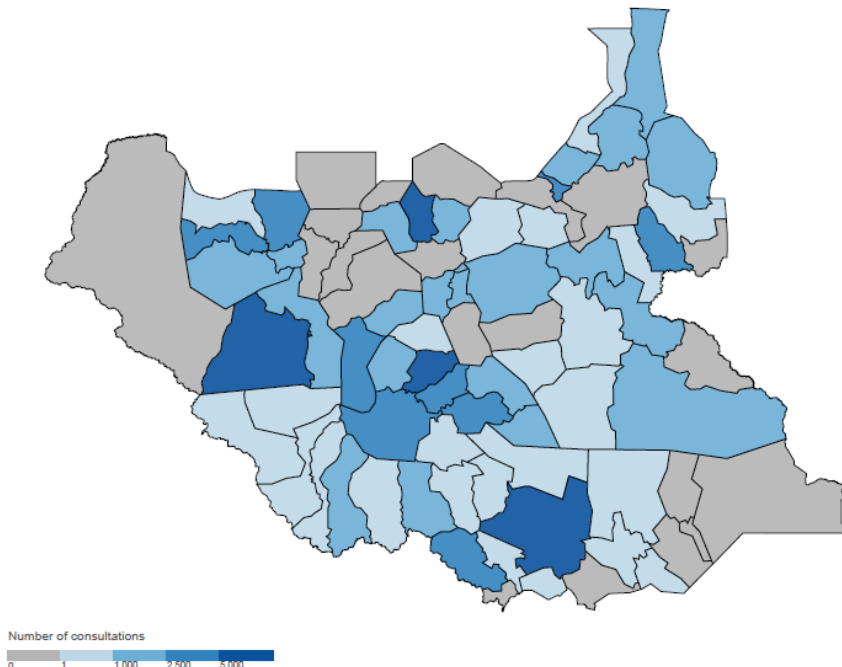
Slide 13 **Measles maps and alert management**

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 (W9 2019)

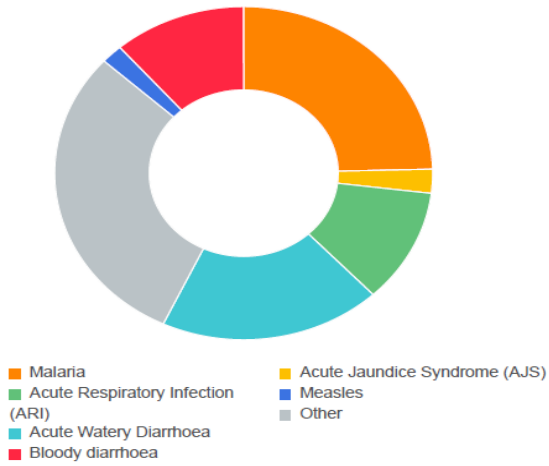


| Hub | W9 | 2019 |
|--------------------|----------------|------------------|
| Aweil | 12,395 | 107,717 |
| Bentiu | 12,180 | 131,445 |
| Bor | 9,770 | 86,517 |
| Juba | 14,109 | 132,130 |
| Kwajok | 5,324 | 123,322 |
| Malakal | 12,597 | 159,043 |
| Rumbek | 18,462 | 191,538 |
| Torit | 1,942 | 40,528 |
| Wau | 8,799 | 107,928 |
| Yambio | 5,897 | 87,140 |
| South Sudan | 101,475 | 1,167,308 |

The total consultation in the country since week 1 of 2019 is 167,308 by hub, Rmbek 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 (2019)

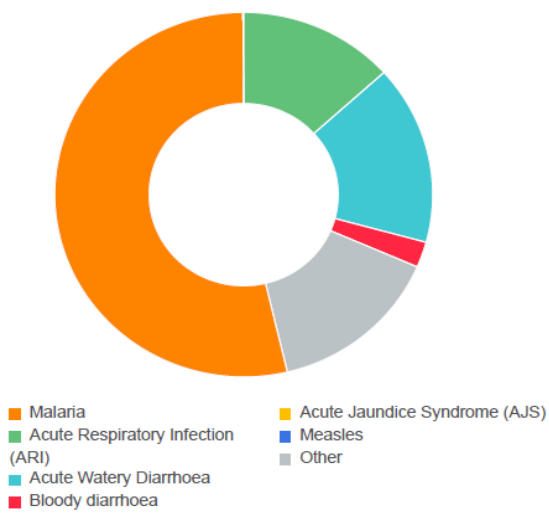


| Syndrome | W9 | | 2019 | |
|---------------------|------------|-------------|------------|-------------|
| | # deaths | % mortality | # deaths | % mortality |
| Malaria | 2 | 1.9% | 158 | 24.6% |
| ARI | 1 | 1.0% | 71 | 11.1% |
| AWD | 12 | 11.7% | 122 | 19.0% |
| Bloody diarrhoea | 8 | 7.8% | 73 | 11.4% |
| AJS | 0 | 0.0% | 15 | 2.3% |
| Measles | 11 | 10.7% | 12 | 1.9% |
| Other | 69 | 67.0% | 191 | 29.8% |
| Total deaths | 103 | 100% | 642 | 100% |

Figure 1, above shows the proportional mortality for 2019, with malaria being the main cause of mortality accounting for 24.6% of the deaths since week 1 of 2019, followed by ARI and malaria

Proportional morbidity

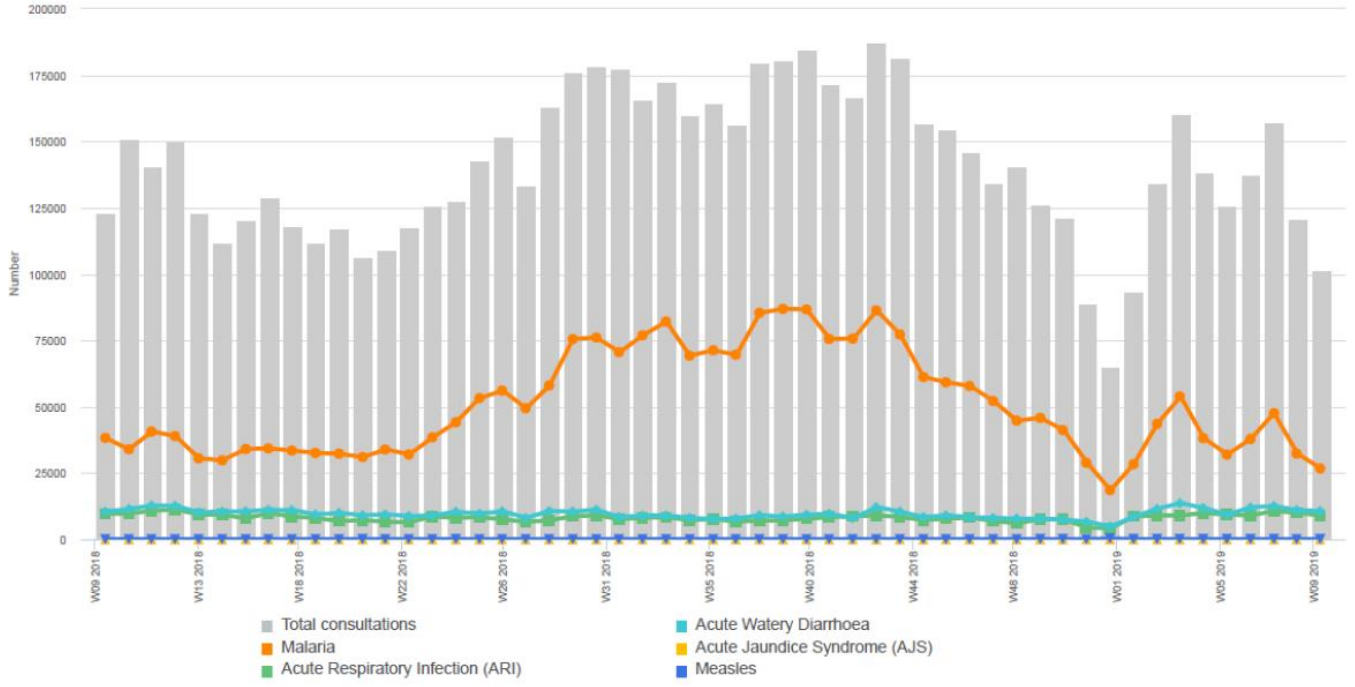
Figure 2 | Proportional morbidity (2019)



| Syndrome | W9 | | 2019 | |
|--------------------|---------------|-------------|----------------|-------------|
| | # cases | % morbidity | # cases | % morbidity |
| Malaria | 26,668 | 46.8% | 339,943 | 53.6% |
| ARI | 8,958 | 15.7% | 84,385 | 13.3% |
| AWD | 10,615 | 18.6% | 100,752 | 15.9% |
| Bloody diarrhoea | 1,733 | 3.0% | 14,468 | 2.3% |
| AJS | 5 | 0.0% | 81 | 0.0% |
| Measles | 28 | 0.0% | 308 | 0.0% |
| Other | 9,003 | 15.8% | 93,791 | 14.8% |
| Total cases | 57,010 | 100% | 633,728 | 100% |

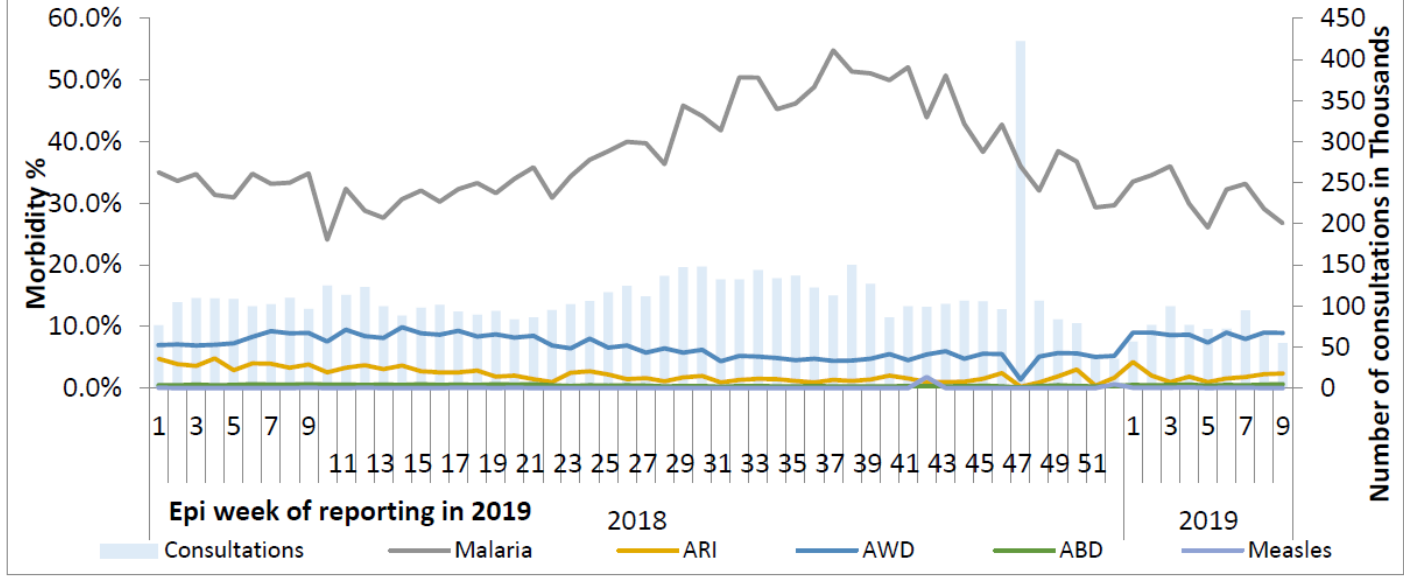
Figure 2, indicates the top causes of morbidity in the country, with malaria being the leading cause of morbidity 26,668 (46.8%) followed by ARI, AWD and ABD respectively since week 1 of 2019. refer to the figure above for more information.

Figure 3 | Trend in total consultations and key diseases (W9)



IDSR Proportionate morbidity trends - in relatively stable states

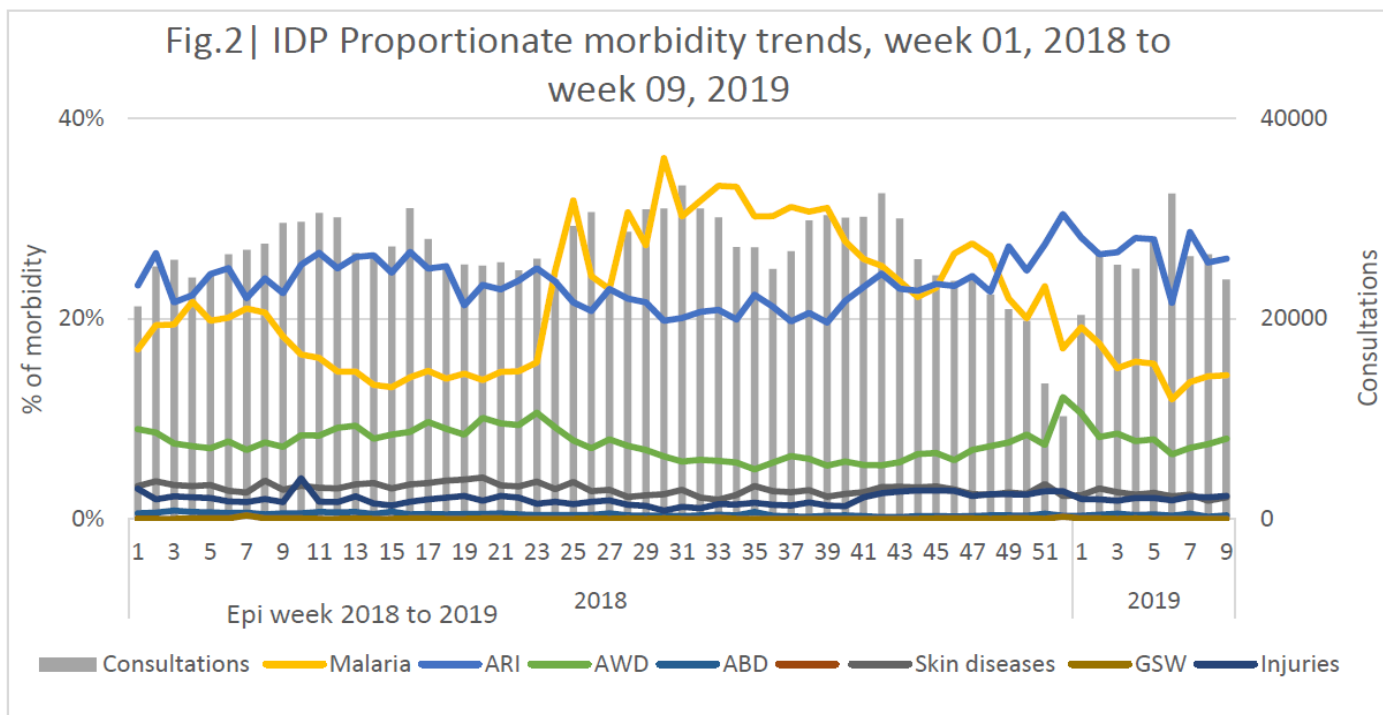
Fig. 1 | IDSR Proportionate morbidity trends, week 1, 2018 to 09, 2019



In the relatively stable states, malaria is the top cause of morbidity accounting for 26.7% of the consultations in week 09 (representing a decline from 29.1% in week 08).

IDP Proportionate morbidity trends - in displaced population

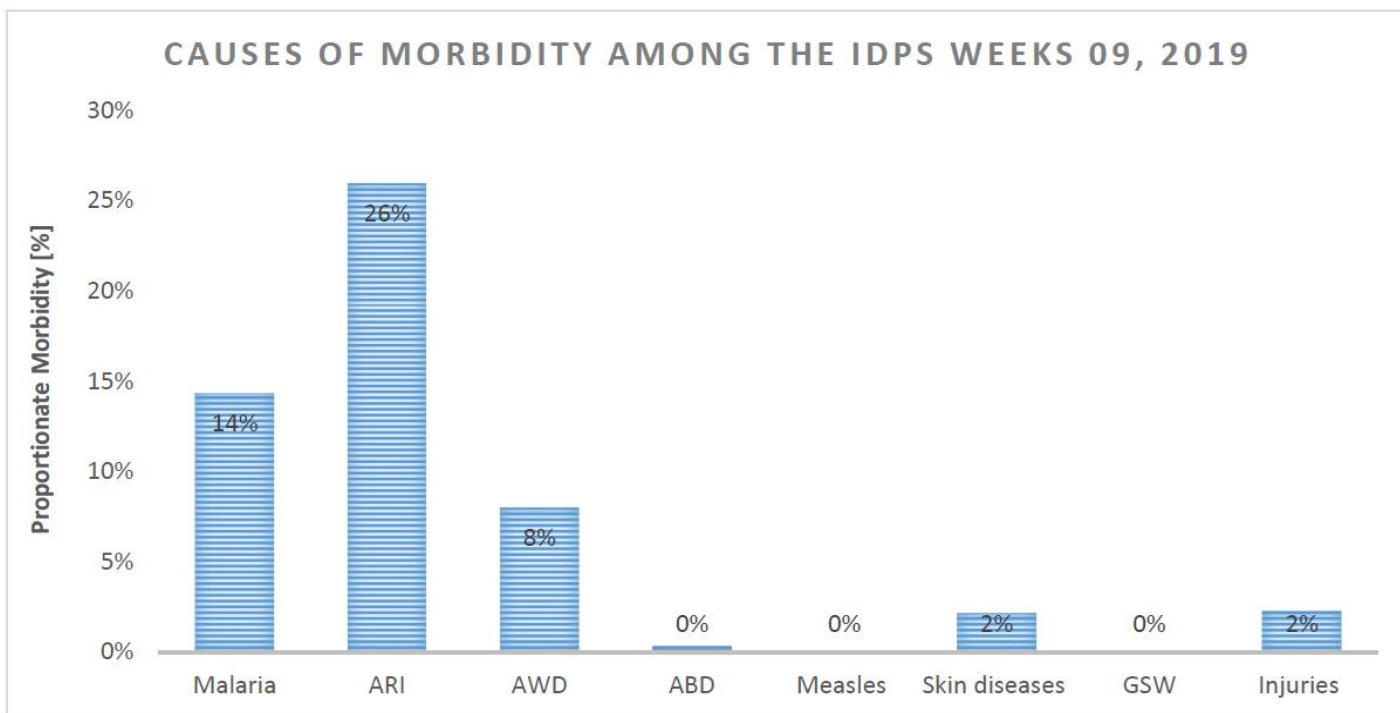
Fig.2 | IDP Proportionate morbidity trends, week 01, 2018 to week 09, 2019



Among the IDPs, ARI and Malaria accounted for 26% and 14% of the consultations in week 09. The other significant causes of morbidity in the IDPs includes AWD, Skin diseases, and Measles.

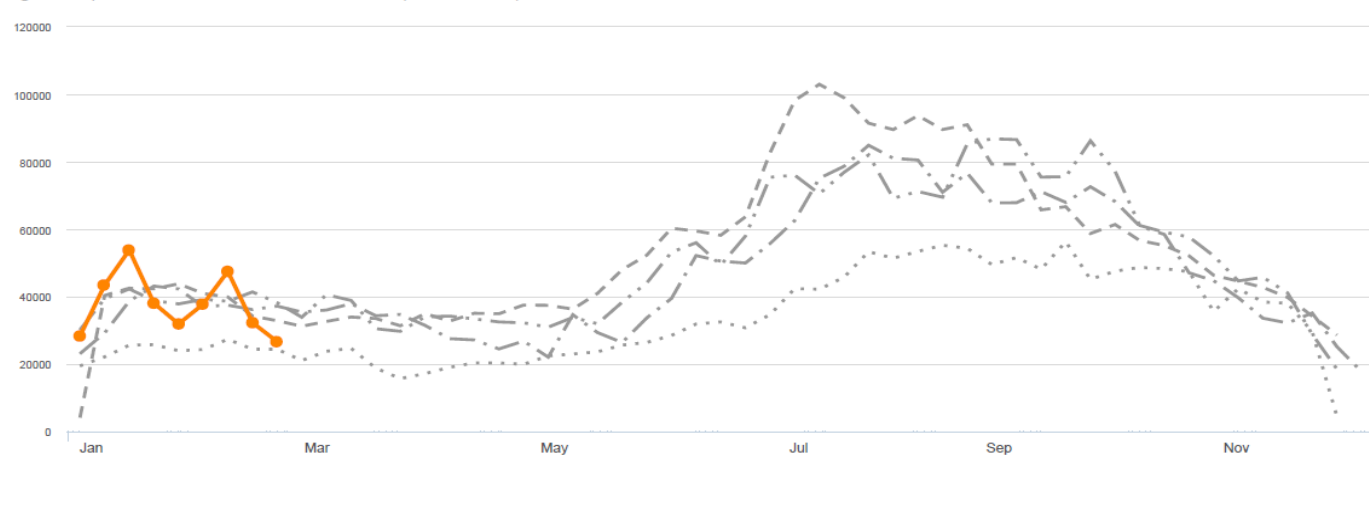
IDP Proportionate morbidity trends - in displaced population

CAUSES OF MORBIDITY AMONG THE IDPS WEEKS 09, 2019



The top causes of morbidity in the IDPs in 2019 include, ARI, Malaria, AWD, Skin diseases, and injuries.

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

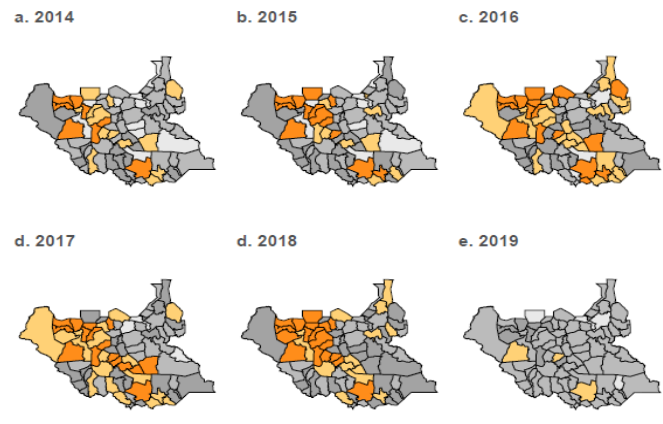


| | | | |
|---|--|---------------------------------------|---|
| <p>Graph legend</p> <ul style="list-style-type: none"> — 2019 - - - 2018 . . . 2017 - . - . 2016 2015 | <p>Key malaria indicators (2019)</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <p>339,943</p> <p>Cases</p> </div> <div style="text-align: center;"> <p>158</p> <p>Deaths</p> </div> <div style="text-align: center;"> <p>30</p> <p>Alerts</p> </div> </div> | <p>Figure 4b % morbidity</p> | <p>Figure 4c Age breakdown</p> |
|---|--|---------------------------------------|---|

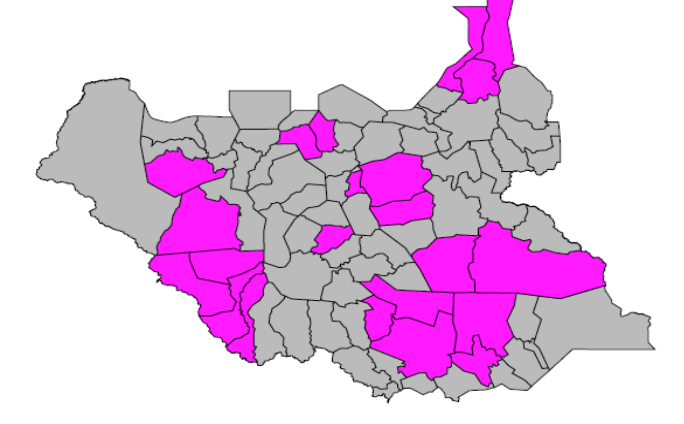
Malaria is the top course of Morbidity in the country, a total of 339,9 43cases with 158 deaths registered since week 1 of 2019. malaria trend for week 09 of 2019 is below 2016, 2017 and,2018 but above 2015 as shown in the figure 4a, above.

Malaria | Maps and Alert Management

Map 2 | Map of malaria cases by county



Map 3 | Map of malaria alerts by county (2019)

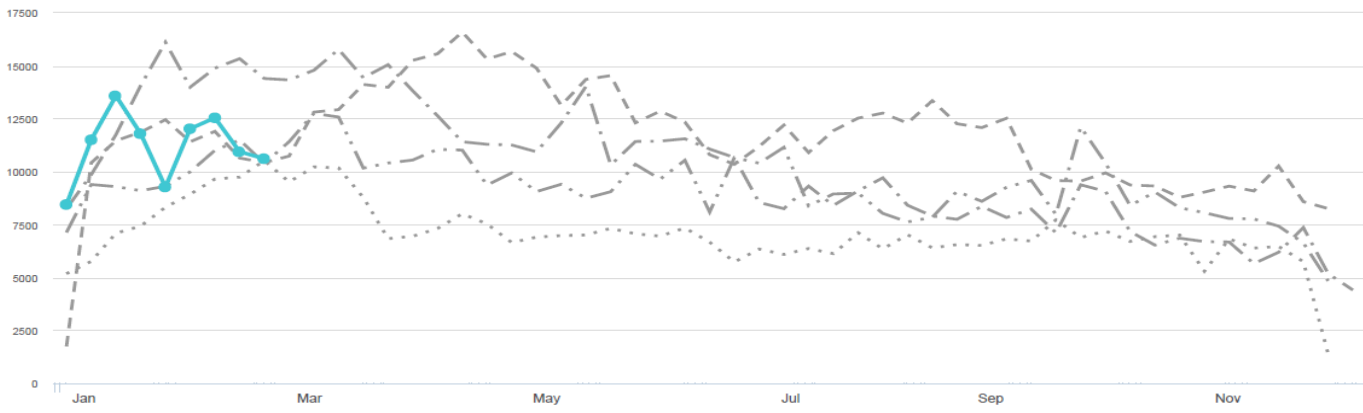


| | | | | | | | | | | | |
|---|--------------------------------|----------------------------------|--|----------|----------|----------|----------|----------|---------------|-----------|----------------|
| <p>Map legend</p> <p>Number of malaria cases</p> <p>Number of malaria alerts</p> <p>Alert threshold Twice the average number of cases over the past 3 weeks. Source: IDSR</p> | <p>30</p> <p>Alerts</p> | <p>26</p> <p>Verified</p> | <p>Risk Assessment</p> <table border="1" style="width: 100%; text-align: center;"> <tr> <td style="background-color: green; color: white;">0</td> <td style="background-color: yellow; color: black;">0</td> <td style="background-color: orange; color: black;">0</td> <td style="background-color: red; color: white;">0</td> </tr> <tr> <td>Low Risk</td> <td>Moderate Risk</td> <td>High Risk</td> <td>Very High Risk</td> </tr> </table> | 0 | 0 | 0 | 0 | Low Risk | Moderate Risk | High Risk | Very High Risk |
| 0 | 0 | 0 | 0 | | | | | | | | |
| Low Risk | Moderate Risk | High Risk | Very High Risk | | | | | | | | |

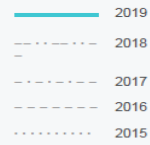
Since the beginning of the year, a total of 30 malaria alerts have been triggered, 26 of those were verified. The Maps above indicate the location reporting malaria alerts from, 2015, 2016, 2017, 2018, and 2019.

Acute Watery Diarrhoea | Trends over time

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



Graph legend



Key AWD indicators (2019)

100,752 Cases
122 Deaths
41 Alerts

Figure 5b | % morbidity

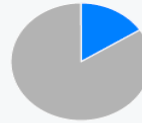
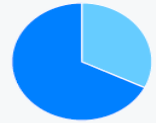


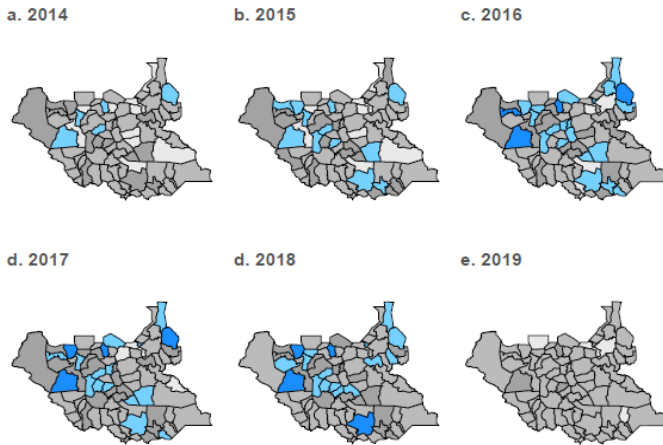
Figure 5c | Age breakdown



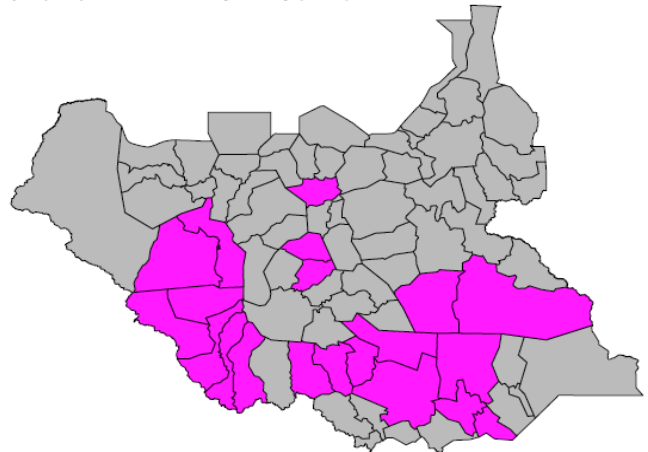
AWD is one of the top causes of morbidity in the country with 100,752 cases reported since week 1 of 2019 including 122 deaths. AWD trend for week 9 of 2019, is below 2015, 2016, 2017, and 2018 as shown in figure 5a, above.

Acute Watery Diarrhoea | Maps and Alert Management

Map 4 | Map of AWD cases by county (2019)

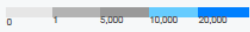


Map 5 | Map of AWD alerts by county (2019)



Map legend

Number of AWD cases



Number of AWD alerts



Alert threshold

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

41

Alerts

31

Verified

Risk Assessment

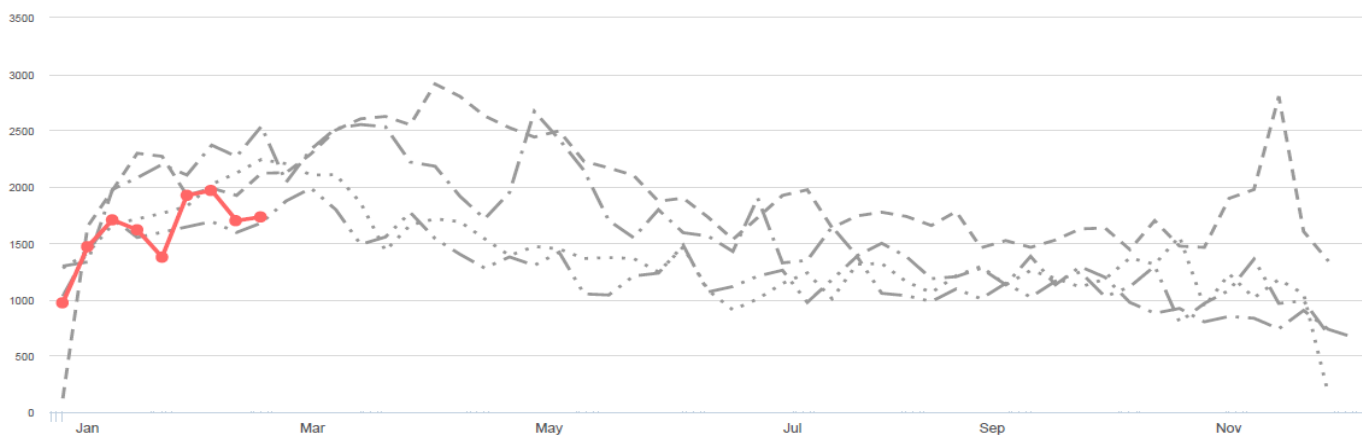


The number of AWD alerts triggered since week 1 of 2019 is 41, out of which 31 were verified. Maps above highlight the areas reporting AWD alerts from 2015 to 2019.



Acute Bloody Diarrhoea | Trends over time

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



Graph legend

- 2019
- - - 2018
- - - 2017
- - - 2016
- 2015

Key bloody diarrhoea indicators (2019)

14,468 Cases
73 Deaths
48 Alerts

Figure 6b | % morbidity



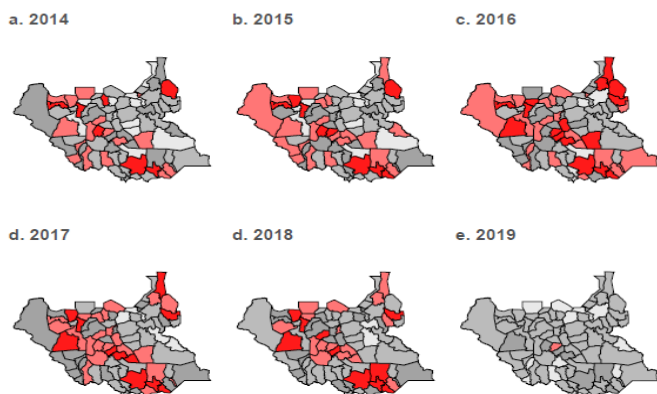
Figure 6c | Age breakdown



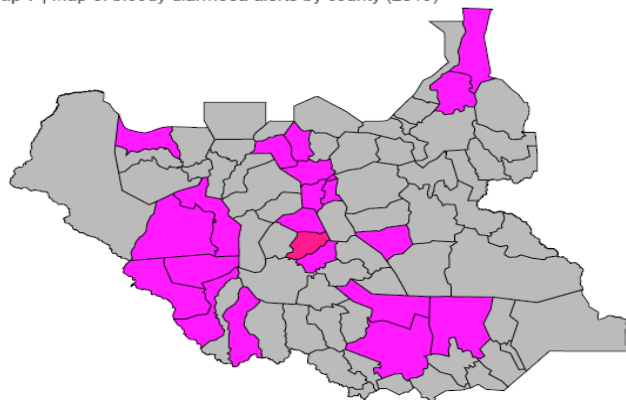
Since week 1 of 2019, a total of 14,468 cases of ABD have been reported country wide including 73 deaths. ABD trend for 2019 is below 2015, 2016, 2017, and 2018 respectively. Refer to figure 6a, above.

Acute Bloody Diarrhoea | Maps and Alert Management

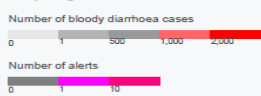
Map 6 | Map of bloody diarrhoea cases by county (2019)



Map 7 | Map of bloody diarrhoea alerts by county (2019)



Map legend



48 Alerts
38 Verified

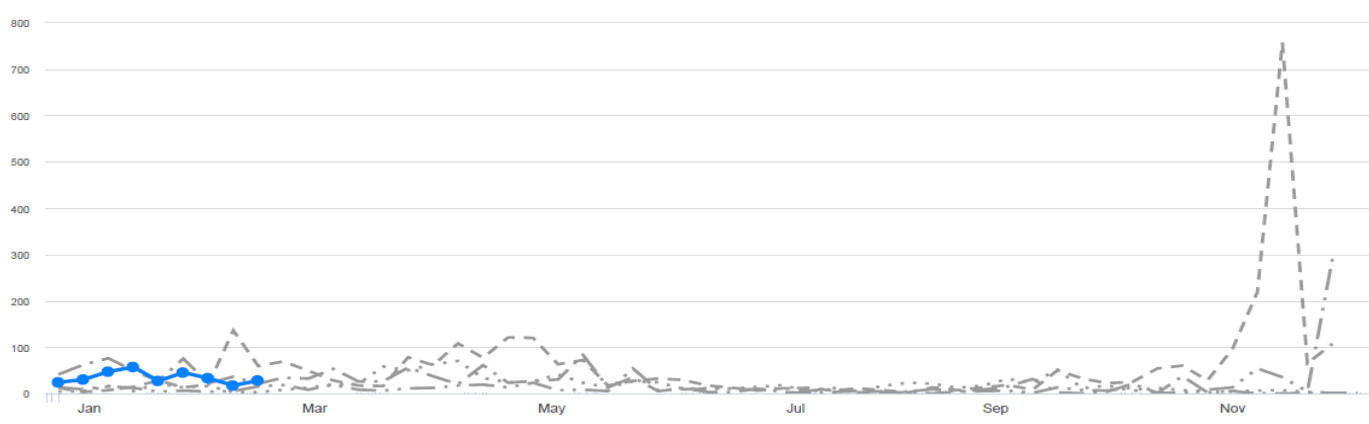
Risk Assessment



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

Total of 48 alerts were generated since week 1 of 2019, of which 38 were verified by the county surveillance team. Maps indicating areas triggering alerts since 2015 to 2019 are shown above.

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



Graph legend

- 2019
- - - 2018
- - - 2017
- - - 2016
- 2015

Key measles indicators (2019)

308
Cases

12
Deaths

81
Alerts

Figure 7b | % morbidity



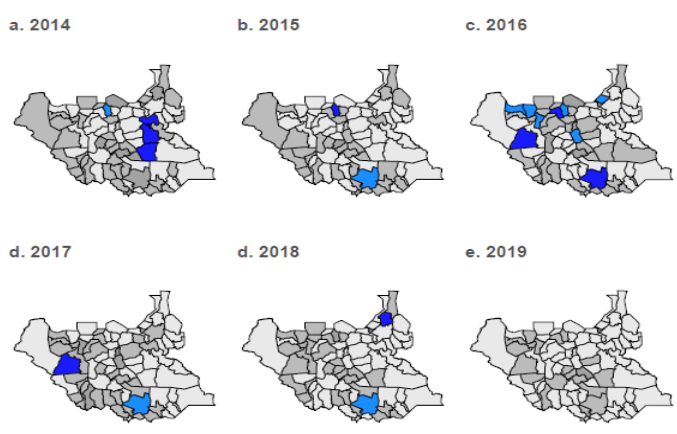
Figure 7c | Age breakdown



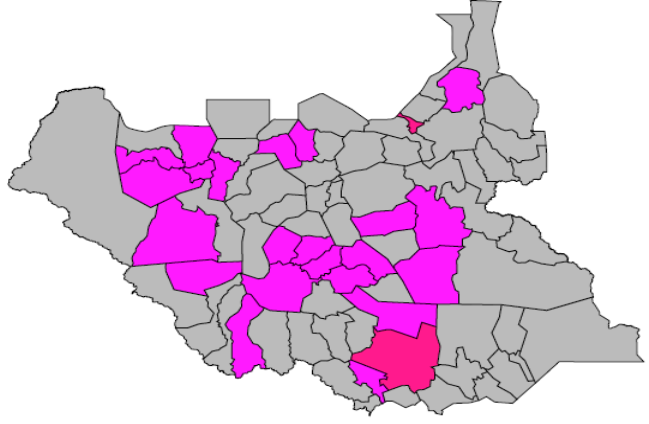
Since the beginning of 2019, at least 308 suspect measles cases including 12 death (CFR 0.74%) have been reported. . Of these, ----- suspect cases have undergone measles case-based laboratory-backed investigation with ----- samples collected out of which ----- measles IgM positive cases; ----- clinically confirmed cases; and ----- cases confirmed by epidemiological linkage.

Measles | Maps and Alert Management

Map 7 | Map of measles cases by county (2019)



Map 8 | Map of measles alerts by county (2019)



Map legend



81
Alerts

68
Verified

Risk Assessment



Alert threshold
1 case.
Source: IDSR

Since week 1 of 2019, 81 alerts of measles were triggered and 68 of those have been verified at county level. Maps of areas raising alerts from 2015 to 2019 are shown above.

**This bulletin is produced by the Ministry of Health with
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>

