South Sudan

Integrated Disease Surveillance and Response (IDSR)

Annexes W6 2018 (Feb 05 – Feb 11)
Contents

Access and Utilization
- Map 1: Map of consultations by county (2018)

Indicator-based surveillance
- Figure 1: Proportional mortality
- Figure 2: Proportional morbidity

Disease trends and maps
Malaria
- Trend in malaria cases over time
- Malaria maps and alert management

Acute Watery Diarrhoea (AWD)
- Trend in AWD cases over time
- AWD maps and alert management

Bloody diarrhoea
- Trend in bloody diarrhoea cases over time
- Bloody diarrhoea maps and alert management

Measles
- Trend in measles cases over time
- Measles maps and alert management

Sources of data
1. Weekly IDS R Reporting Form
2. Weekly EWARS Reporting Form

Access and Utilization | Map of consultations by county
Proportional mortality

![Proportional mortality chart](image)

<table>
<thead>
<tr>
<th>Syndrome</th>
<th>W6</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td># deaths</td>
<td>% mortality</td>
</tr>
<tr>
<td>Malaria</td>
<td>1</td>
<td>50.0%</td>
</tr>
<tr>
<td>ARI</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>AWD</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Bloody diarrhoea</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>AJS</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Measles</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>50.0%</td>
</tr>
<tr>
<td>Total deaths</td>
<td>2</td>
<td>100%</td>
</tr>
</tbody>
</table>

Proportional morbidity

![Proportional morbidity chart](image)

<table>
<thead>
<tr>
<th>Syndrome</th>
<th>W6</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td># cases</td>
<td>% mortality</td>
</tr>
<tr>
<td>Malaria</td>
<td>37,018</td>
<td>55.4%</td>
</tr>
<tr>
<td>ARI</td>
<td>10,422</td>
<td>15.6%</td>
</tr>
<tr>
<td>AWD</td>
<td>9,123</td>
<td>13.6%</td>
</tr>
<tr>
<td>Bloody diarrhoea</td>
<td>1,380</td>
<td>2.1%</td>
</tr>
<tr>
<td>AJS</td>
<td>1</td>
<td>0.0%</td>
</tr>
<tr>
<td>Measles</td>
<td>6</td>
<td>0.0%</td>
</tr>
<tr>
<td>Other</td>
<td>8,897</td>
<td>13.3%</td>
</tr>
<tr>
<td>Total cases</td>
<td>66,847</td>
<td>100%</td>
</tr>
</tbody>
</table>
In the relatively stable states, malaria is the top cause of morbidity accounting for 36.1% of the consultations in week 6 (representing an increase from 31.4% in week 5).
Among the IDPs, ARI and malaria accounted for 24.8% and 20% of consultations in week 6. 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.
Malaria | Trends over time

![Graph showing trend in number of cases over time (South Sudan)](image)

**Graph legend**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cases</td>
<td>216,681</td>
<td>39</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deaths</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alerts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Figure 4b | % morbidity**

**Figure 4c | Age breakdown**

Malaria | Maps and Alert Management

![Map of malaria cases by county (2018)](image)

**Map legend**

- Number of malaria cases
- Number of malaria alerts
- Alert threshold

**Risk Assessment**

- Low Risk
- Moderate Risk
- High Risk
- Very High Risk

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

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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):
- **50,728** Cases
- **2** Deaths
- **22** Alerts

**Figure 5b | % morbidity**

**Figure 5c | Age breakdown**

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
- Number of AWD alerts

Risk Assessment:
- **22** Alerts
- **7** Verified

Alert threshold: Twice the average number of cases over the past 3 weeks. Source: IDSR
Acute Bloody Diarrhoea | Trends over time

![Graph showing trends in bloody diarrhoea cases over time (South Sudan)](image)

**Graph legend**

**Key bloody diarrhoea indicators (2018)**

- 2018: 7,817 Cases, 1 Death, 32 Alerts
- 2017: 9,234 Cases, 0 Deaths, 45 Alerts
- 2016: 10,321 Cases, 2 Deaths, 50 Alerts
- 2015: 11,432 Cases, 3 Deaths, 60 Alerts
- 2014: 12,543 Cases, 4 Deaths, 70 Alerts

**Figure 6b | % morbidity**

**Figure 6c | Age breakdown**

Acute Bloody Diarrhoea | Maps and Alert Management

![Map showing distribution of bloody diarrhoea cases by county (2018)](image)

**Map legend**

- Number of bloody diarrhoea cases
- Number of alerts
- Alert threshold: Twice the average number of cases over the past 3 weeks. Source: EDSR

**Risk Assessment**

- Low Risk: 32 Alerts
- Moderate Risk: 5 Alerts
- High Risk: 0
- Very High Risk: 0
Since the beginning of 2018, at least 59 suspect measles cases including at least 1 death (CFR 4.5%) have been reported. Of these, 44 suspect cases have undergone measles case-based laboratory-backed investigation with 28 samples collected out of which 10 measles IgM positive cases; 14 clinically confirmed cases; and 3 cases confirmed by epidemiological linkage.
In week 6, 2018, six new AFP cases were reported from Lakes, NBeG, and Warrap hubs. This brings the cumulative total for 2018 to 28 AFP cases.

The annualized non-Polio AFP (NPAFP) rate (cases per 100,000 population children 0-14 years) in 2018 is 2.95 per 100,000 population of children 0-14 years (target ≥2 per 100,000 children 0-14 years).

Stool adequacy was 96% in 2017, 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.

Source: South Sudan Weekly AFP Bulletin

### Mortality in the IDPs

Table 6 | Proportional mortality by cause of death in IDPs W6 2018

<table>
<thead>
<tr>
<th>Cause of Death by IDP site</th>
<th>Bentiu &lt;5yrs</th>
<th>Bentiu ≥5yrs</th>
<th>Juba 3 &lt;5yrs</th>
<th>Juba 3 ≥5yrs</th>
<th>Total deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gunshot wound</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Hypoxia</td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>malaria</td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Meningitis</td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>TB/HIV/AIDS</td>
<td></td>
<td>1</td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Unknown</td>
<td>3</td>
<td></td>
<td>1</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>TB</td>
<td>1</td>
<td></td>
<td>3</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>HIV</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
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<tr>
<td>Hypolycanemia</td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
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<tr>
<td>Congested Heart Failure</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Hepatic Failure</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Multiple Organs Failure</td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Acute kidney failure</td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Wasting Syndrome</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total deaths</td>
<td>1</td>
<td>10</td>
<td>1</td>
<td>6</td>
<td>18</td>
</tr>
</tbody>
</table>

Among the IDPs, mortality data was received from Bentiu PoC & UN House PoC in week 6. (Table 6). **A total of 18 deaths** were reported during the week. Bentiu PoC reported 11 (61%) deaths in the week. During the week, 2 (11%) deaths were recorded among children <5 years in (Table 6).

The causes of death during week 6 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 6 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 6 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 W6, 2018

<table>
<thead>
<tr>
<th>IDP site</th>
<th>acute watery diarrhoea</th>
<th>Asthma</th>
<th>Cancer</th>
<th>Gunshot wounds</th>
<th>Heart Failure</th>
<th>Kala-Azar</th>
<th>Liver Cirrhosis</th>
<th>Malaria</th>
<th>Menigitis</th>
<th>perinatal death</th>
<th>Pneumonia</th>
<th>Rabies</th>
<th>SAM</th>
<th>Sepsis</th>
<th>TB/HIV/AIDS</th>
<th>TB/HIV</th>
<th>Trauma</th>
<th>HIV/AIDS</th>
<th>TB</th>
<th>HIV</th>
<th>Slep TB</th>
<th>Others</th>
<th>Grand Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bentiu</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>3</td>
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<td>2</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>4</td>
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<td>1</td>
<td>31</td>
<td>64</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Juba 3</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>4</td>
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<td>3</td>
<td>10</td>
<td>3</td>
<td>16</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Malakal</td>
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<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>3</td>
<td>10</td>
<td>3</td>
<td>7</td>
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<td>1</td>
<td>39</td>
<td>98</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Akobo</td>
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<td>1</td>
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</tr>
<tr>
<td>Grand Total</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>3</td>
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<td>5</td>
<td>1</td>
<td>1</td>
<td>39</td>
<td>98</td>
<td></td>
</tr>
</tbody>
</table>

Proportionate mortality [%] | 1% | 2% | 3% | 1% | 3% | 3% | 1% | 5% | 3% | 8% | 4% | 1% | 2% | 2% | 1% | 1% | 1% | 5% | 10% | 1% | 1% | 40% | 100% |

- A total of 98 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.

World Health Organization
South Sudan

11
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