South Sudan

Integrated Disease Surveillance and Response (IDSR)

Epidemiological Update W16 2018 (Apr 16- Apr 22)
• Completeness for IDSR reporting at county level was 55%. Completeness for EWARS reporting from IDP sites was 83%.

• A total of 9 alerts were reported, of which 100% have been verified. 0 alerts were risk assessed and 0 required a response.

• Rift Valley Fever outbreak - Yirol East with 55 suspect human cases including 6 confirmed; 3 probable; 26 non-cases; and 20 pending classification (with no samples collected). Nine confirmed animal cases (cattle).

• Suspect rabies cases continue to be reported in Bentiu PoC with a cumulative of 139 suspect cases including 2 deaths reported since Dec 2017. Community engagement, social mobilization, and risk communication, preventive vaccination, and discussions on curling stray dogs are underway.

• Hepatitis E cases have been confirmed in Bentiu PoC and Old Fangak where a total of nine suspect cases have been reported. Out of the nine suspect cases; 7 have been confirmed IgM positive for HEV by ELISA (6 positive in Bentiu PoC and 1 positive in Old Fangak). The Ministry of Health and partners are working together to enhance surveillance, case investigation, sample collection, supportive clinical care, and WASH.
### Table 1 | IDSR surveillance performance indicators by county (W16 2018)

<table>
<thead>
<tr>
<th>Hub</th>
<th>Reporting</th>
<th>Performance (W16 2018)</th>
<th>Performance (Cumulative 2018)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td># counties</td>
<td># reports received</td>
<td>Completeness</td>
</tr>
<tr>
<td>Aweil</td>
<td>5</td>
<td>2</td>
<td>40%</td>
</tr>
<tr>
<td>Bentiu</td>
<td>9</td>
<td>5</td>
<td>56%</td>
</tr>
<tr>
<td>Bor</td>
<td>11</td>
<td>3</td>
<td>27%</td>
</tr>
<tr>
<td>Juba</td>
<td>6</td>
<td>2</td>
<td>33%</td>
</tr>
<tr>
<td>Kwajok</td>
<td>7</td>
<td>4</td>
<td>57%</td>
</tr>
<tr>
<td>Malakal</td>
<td>13</td>
<td>1</td>
<td>8%</td>
</tr>
<tr>
<td>Rumbek</td>
<td>8</td>
<td>8</td>
<td>100%</td>
</tr>
<tr>
<td>Torit</td>
<td>8</td>
<td>6</td>
<td>75%</td>
</tr>
<tr>
<td>Wau</td>
<td>3</td>
<td>3</td>
<td>100%</td>
</tr>
<tr>
<td>Yambio</td>
<td>10</td>
<td>10</td>
<td>100%</td>
</tr>
<tr>
<td>South Sudan</td>
<td>80</td>
<td>44</td>
<td>55%</td>
</tr>
</tbody>
</table>

- Completeness for IDSR reporting at county level was 55% in week 16 and cumulatively at 70% for 2018
- Timeliness for IDSR reporting at county level was 55% in week 16 and cumulatively at 55% for 2018
The graph shows completeness for weekly reporting at county level. The national average currently stands at **70%**.
Counties that submitted IDSR reports in W16 are shown in green in map 1a.

Counties that did not submit IDSR reports in W16 are shown in grey in map 1a.
### Table 4 | EWARS surveillance performance indicators by partner (W16 2018)

<table>
<thead>
<tr>
<th>Partner</th>
<th>Performance</th>
<th>Reporting (W16 2018)</th>
<th>Reporting (Cumulative 2018)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td># sites</td>
<td># reports received</td>
<td>Completeness</td>
</tr>
<tr>
<td>CMD</td>
<td>2</td>
<td>2</td>
<td>100%</td>
</tr>
<tr>
<td>GOAL</td>
<td>2</td>
<td>2</td>
<td>100%</td>
</tr>
<tr>
<td>HLSS</td>
<td>1</td>
<td>1</td>
<td>100%</td>
</tr>
<tr>
<td>IMA</td>
<td>5</td>
<td>5</td>
<td>100%</td>
</tr>
<tr>
<td>IMC</td>
<td>6</td>
<td>6</td>
<td>100%</td>
</tr>
<tr>
<td>IOM</td>
<td>10</td>
<td>9</td>
<td>90%</td>
</tr>
<tr>
<td>IRC</td>
<td>1</td>
<td>1</td>
<td>100%</td>
</tr>
<tr>
<td>Medair</td>
<td>2</td>
<td>2</td>
<td>100%</td>
</tr>
<tr>
<td>MSF-E</td>
<td>2</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>MSF-H</td>
<td>2</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>SMC</td>
<td>6</td>
<td>6</td>
<td>100%</td>
</tr>
<tr>
<td>UNIDO</td>
<td>1</td>
<td>1</td>
<td>100%</td>
</tr>
<tr>
<td>UNKEA</td>
<td>2</td>
<td>2</td>
<td>100%</td>
</tr>
<tr>
<td>World Relief</td>
<td>1</td>
<td>1</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>46</strong></td>
<td><strong>38</strong></td>
<td><strong>83%</strong></td>
</tr>
</tbody>
</table>

Timeliness and completeness for EWARN/IDP reporting stands at 83% for week 16 while cumulatively, completeness and timeliness are 72% and 70% respectively for 2018.
A total of 9 alerts were reported in week 16 with 100% of the alerts in week 16 being verified; 0% were risk assessed and 0% required a response.

### Table 7 | Alert performance indicators by Hub

<table>
<thead>
<tr>
<th>Hub</th>
<th>W16</th>
<th>Cumulative (2018)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td># alerts</td>
<td>% verif.</td>
</tr>
<tr>
<td>Aweil</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Bentiu</td>
<td>1</td>
<td>100%</td>
</tr>
<tr>
<td>Bor</td>
<td>3</td>
<td>100%</td>
</tr>
<tr>
<td>Juba</td>
<td>1</td>
<td>100%</td>
</tr>
<tr>
<td>Kwajok</td>
<td>1</td>
<td>100%</td>
</tr>
<tr>
<td>Malakal</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Rumbek</td>
<td>1</td>
<td>100%</td>
</tr>
<tr>
<td>Torit</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Wau</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Yambio</td>
<td>2</td>
<td>100%</td>
</tr>
<tr>
<td><strong>South Sudan</strong></td>
<td><strong>9</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

### Table 8 | Summary of key alert indicators

<table>
<thead>
<tr>
<th>W16</th>
<th>Cumulative (2018)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>9</strong></td>
<td>257</td>
</tr>
<tr>
<td><strong>100%</strong></td>
<td><strong>65%</strong></td>
</tr>
<tr>
<td><strong>0%</strong></td>
<td><strong>0%</strong></td>
</tr>
<tr>
<td><strong>0%</strong></td>
<td><strong>2%</strong></td>
</tr>
<tr>
<td><strong>0%</strong></td>
<td><strong>1%</strong></td>
</tr>
</tbody>
</table>
During the week, malaria, AWD, ABD, and measles were the most frequent infectious hazards reported.
Alert by disease and county in W16 2018

During week 16, a total of 9 alerts were reported.

The table and chart show the distribution of alerts by hazard and location - all of which were verified by field teams for possible follow up investigations.

<table>
<thead>
<tr>
<th>County</th>
<th>Acute Watery Diarrhoea</th>
<th>Bloody Diarrhoea</th>
<th>Guinea Worm</th>
<th>Measles</th>
<th>Malaria</th>
<th>Total Alerts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bor</td>
<td>1</td>
<td></td>
<td></td>
<td>2</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Ezo</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Juba</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Koch</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Maridi</td>
<td></td>
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<td></td>
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<td></td>
<td>1</td>
</tr>
<tr>
<td>Tonj North</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Yirol West</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td><strong>Total Alerts</strong></td>
<td><strong>2</strong></td>
<td><strong>2</strong></td>
<td><strong>1</strong></td>
<td><strong>2</strong></td>
<td><strong>2</strong></td>
<td><strong>9</strong></td>
</tr>
</tbody>
</table>

Alerts by hazard in week 15 and week 16, 2018

![Bar chart showing alerts by hazard in week 15 and week 16, 2018](chart.png)
The Figure shows the cumulative number of alerts triggered in 2018 by hazard and location.
The Figures show the cumulative alerts triggered in 2018 by location.

Most alerts have been reported from Juba, Aweil East, and Yirol West.
The Figures show the cumulative alerts by risk assessment state in 2018.
Of the 266 alerts reported in 2018; a total of 249 alerts are at verification stage; and the rest are at risk assessment stage (9 alerts); 8 at outcome stage.
Confirmed Outbreaks South Sudan – 29 April 2018

- Measles
- Rubella
- Rift Valley Fever
- Anthrax
- Hepatitis E virus [HEV]
- Foodborne disease

IPC - Emergency phase
IPC - Crisis phase
IPC - Stressed phase
<table>
<thead>
<tr>
<th>Aetiologic agent</th>
<th>Location (county)</th>
<th>Date first reported</th>
<th>New cases since last bulletin</th>
<th>Cumulative cases to date (attack rate %)</th>
<th>Interventions</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>New epidemics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Ongoing epidemics</strong></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RVF</td>
<td>Yirol East</td>
<td>28/12/2017</td>
<td>2</td>
<td>55 (0.051)</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Rubella</td>
<td>Jur River</td>
<td>14/02/2018</td>
<td>2</td>
<td>65 (0.034)</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Rubella</td>
<td>Juba</td>
<td>26/02/2018</td>
<td>0</td>
<td>22 (0.0037)</td>
<td>Yes</td>
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<tr>
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<td></td>
<td>No</td>
</tr>
<tr>
<td>Rubella</td>
<td>Mayom</td>
<td>22/02/2018</td>
<td>0</td>
<td>08 (0.004)</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Hepatitis E</td>
<td>Old Fangak</td>
<td>15/02/2018</td>
<td>0</td>
<td>01 (0.001)</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Hepatitis E</td>
<td>Bentiu PoC</td>
<td>03/01/2018</td>
<td>0</td>
<td>08 (0.007)</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Rabies probable</td>
<td>Bentiu PoC</td>
<td>06/12/2017</td>
<td>0</td>
<td>69 (0.061)</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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<td></td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Controlled epidemics</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measles</td>
<td>Aweil Center</td>
<td>6/Jan/2018</td>
<td>0</td>
<td>22 (0.021)</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Measles</td>
<td>Cueibet</td>
<td>14/10/2017</td>
<td>0</td>
<td>20 (0.012)</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Measles</td>
<td>Aweil East</td>
<td>05/02/2018</td>
<td>0</td>
<td>31 (0.006)</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Foodborne</td>
<td>Bor South</td>
<td>18/02/2018</td>
<td>0</td>
<td>434 (29)</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Cut. Anthrax</td>
<td>Mayom</td>
<td>27/01/2018</td>
<td>0</td>
<td>2 (0.001)</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Meningitis</td>
<td>Torit</td>
<td>17/01/2018</td>
<td>0</td>
<td>173 (0.107)</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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<td></td>
<td>No</td>
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<tr>
<td></td>
<td></td>
<td></td>
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<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N/A</td>
</tr>
</tbody>
</table>
Hepatitis E, Bentiu PoC and Old Fangak

At least 9 suspect case of Hepatitis E (HEV) have been reported in 2018. Of the nine suspect cases, a total of 7 cases have been confirmed as HEV (6 in Bentiu PoC & 1 in Old Fangak).

- At least 60% of the cases are 1-9 years of age; and 62% being male.
- Health-WASH partners meeting convened in Bentiu PoC on 26 Apr 2018 and agreed to:
  - Map line listed cases to facilitate source identification
  - Health partners to conduct joint Continuous Medical Education session for the healthcare workers
  - Unicef to share key HEV messages - for radio [Kondial FM] and community sensitizations
  - A special follow up WASH meeting to be convened to assess and address WASH gaps
Two new suspect cases in week 17. In the period 7 December 2017 to 29 April 2018, a total of 55 suspect RVF cases were reported in Eastern Lakes.

These were reclassified based on investigations and laboratory results, such that as of 29th April 2018, there were a total of six (6) RVF confirmed cases, three (3) probable, and 20 suspect RVF cases (with no samples collected and hence no laboratory results).

Twenty six (26) cases were discarded as non-cases following negative laboratory results for RVF and other common causes of viral haemorrhagic fever.

A total of nine animal samples have been confirmed serologically (3IgM and 6IgG).

Current response entails surveillance, laboratory testing, supportive care for suspect cases, and community sensitization on hygienic animal handling.
Rubella in Jur River and Wau counties

- Two new suspect Rubella cases reported in week 16.
- At least 65 rubella cases have been reported from Jur River (59 cases) and Wau (6 cases) with no deaths.
- Cases have been reported from week 4 of 2018.
- Most cases were not vaccinated.
- Most cases (57.4%) are aged 1-4 years.
- Most cases (85.2%) are from Wan Bai payam in Jur River county.
- Females constitute 41% of the cases reported.
- No cases reported in females of childbearing age.
- The current response entails case identification, line listing, supportive care for suspect cases; and community mobilization for enhanced routine immunization.
- Health authorities (at health facility and CHD) and partners are advised to continue case-based surveillance with sample collection and line listing for suspect cases; provide supportive care to suspect cases; and enhance routine immunization for infants - at static clinics & outreach posts.
Suspect meningitis, Yieth Liet, Kuach South, Gogrial West county

- There are no new suspect cases reported in relation to this event.
- WHO working with sMoH and partners to enhance community surveillance in the area and to provide essential medicines to Magai PHCU.
- SSRC home health promoters engaged to conduct active case surveillance in the area and to refer any new suspect cases to Magai PHCU.
- On 28th Mar 2018; the Director Gogrial West reported community deaths in Kuach South that were verified by the RRT on 29 Mar 2018.
- The clinical and lab tests on suspect cases were consistent with malaria and the cases responded to treatment with ACTs.
- All deaths were not taken to the health facility
- All the deaths were 10 years and above and 50% of the deaths were 20 years and above.
- Given the dramatic nature of symptoms, the other differential diagnosis to keep an eye on is epidemic meningitis.
- Surveillance for suspect meningitis cases has been enhanced.
Animal bites - suspect rabies, Bentiu PoC

During week 15, a total of 9 animal bite cases were reported in Bentiu PoC.

A cumulative of 139 animal bite cases including 2 deaths have been reported since 6 Dec 2017.

Sectors 3, 4, & 5 have reported most cases and children <19yrs constitute more than 50% of the cases with males affected more than females.

Post exposure vaccination ongoing with support from MSF-H and partners.

WHO/health cluster have secured antirabies vaccine to support the response.

Community messaging underway via CCCM/internews/UNMISS broadcast.

Discussions underway on the feasibility of curling stray dogs.
Cholera preparedness and preventive activities - Oral cholera vaccine campaigns - 2018

<table>
<thead>
<tr>
<th>Site</th>
<th>Total population</th>
<th>Target population</th>
<th>1st round doses</th>
<th>2nd round doses</th>
<th>Total doses</th>
<th>1st Round dates</th>
<th>2nd Round dates</th>
<th>Partners</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malakal PoC</td>
<td>24,424</td>
<td>23,691</td>
<td>34,291</td>
<td>34,291</td>
<td>19-23March 2018</td>
<td>Apr 17-21 2018</td>
<td>MoH, WHO, Unicef, IOM</td>
<td></td>
</tr>
<tr>
<td>Torit</td>
<td>160,000</td>
<td>155,200</td>
<td>155,200</td>
<td>155,200</td>
<td>310,400</td>
<td>TBD</td>
<td>MoH, WHO, Unicef, SCI, CARE</td>
<td></td>
</tr>
<tr>
<td>Yirol East &amp; West</td>
<td>268,446</td>
<td>260,393</td>
<td>260,392</td>
<td>260,392</td>
<td>520,784</td>
<td>TBD</td>
<td>MoH, WHO, Unicef, LiveWell</td>
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</tr>
<tr>
<td>Lankien</td>
<td>65,000</td>
<td>63,050</td>
<td>63,050</td>
<td>63,050</td>
<td>126,100</td>
<td>TBD</td>
<td>MoH, WHO, Unicef, MSF-H</td>
<td></td>
</tr>
<tr>
<td>Panyijiar</td>
<td>76,000</td>
<td>73,720</td>
<td>75,000</td>
<td>75,000</td>
<td>150,000</td>
<td>TBD</td>
<td>MoH, WHO, Unicef, IRC</td>
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<tr>
<td>Totals</td>
<td>880,896</td>
<td>854,469</td>
<td>644,793</td>
<td>684,835</td>
<td>1,529,628</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

- Cholera prevention and response activities are already underway to mitigate the risk of cholera outbreaks in cholera transmission hotspots.
- These efforts are critical now at the rain season is starting for the states in the Southern parts of the country.
- The use of oral cholera vaccines alongside WASH and other interventions is critical to these efforts.
- Preventive vaccine campaigns (with oral cholera vaccines) for the first half of 2018 are listed in the table.
- A additional 113,800 doses of oral cholera vaccines requested from GTFCC arrived in the country on 18/04/2018.
- GTFCC secured support from GAVI for a consultant that is in the country to finalize the cholera prevention and response plan for South Sudan.

Oral cholera vaccine campaigns completed in 2018 include:
- Malakal Town (2nd round)
- Aburoc IDPs (2nd round)
- Malakal PoC (1st & 2nd round)
- Wau PoC+IDPs (1st & 2nd round)

Upcoming campaigns for 2018:
- Juba Town - (2nd round) - started 25th Apr 18 & is ongoing
- Torit (1st round)
- Yirol East and Yirol West (1st round)
- Lankien, Akobo, Pieri & Karam (1st round)
Preparedness | Cholera preventive activities

Oral cholera vaccine campaigns administrative coverage - 2018

The following OCV campaigns have been completed in 2018:
- Malakal Town (2nd round)
- Aburoc IDPs (2nd round)
- Budi county (2nd round)
- Malakal PoC (1st & 2nd round) - 2nd round data pending
- Wau PoC+IDPs (1st & 2nd round)
<table>
<thead>
<tr>
<th>Date of report</th>
<th>Disease suspected</th>
<th>Number cases (deaths)</th>
<th>County</th>
<th>Payam</th>
<th>Status of investigations</th>
</tr>
</thead>
<tbody>
<tr>
<td>13 Mar 2018</td>
<td>Meningitis</td>
<td>16 (00)</td>
<td>Duk</td>
<td>Ayueldit</td>
<td>On 12 Mar 2018; a 3 year old male from Buongjok area, Ayueldit payam was admitted to Padiet PHCC. The health partner SMC requested for guidance on managing the case and the WHO Bor team shared the meningitis case management guidelines. Surveillance has been stepped up but no additional cases have been identified.</td>
</tr>
<tr>
<td>17 Feb 2018</td>
<td>Meningitis</td>
<td>173 (31)</td>
<td>Torit</td>
<td>Iyire and Imurok</td>
<td>After rumors of strange illness in Iyire, several RRT verification and response missions have been undertaken since 20 Feb 2018. Torit county surpassed in the alert and epidemic thresholds in week 7 and week 9 respectively. Conclusive laboratory confirmation underway. Overall coordination, case surveillance, line listing, and investigation are ongoing. Transmission declined after week 9 with the weekly attack rate falling below the alert and epidemic threshold in week 11, 12, 13, 14, &amp; 15.</td>
</tr>
<tr>
<td>10 Mar 2018</td>
<td>Meningitis</td>
<td>3 (0)</td>
<td>Cueibet</td>
<td></td>
<td>Since 10 Mar 2018, at least three suspect meningitis cases have been reported by CUAMM in Cueibet hospital. However, no samples were collected.</td>
</tr>
<tr>
<td>2 Feb 2018</td>
<td>Meningitis</td>
<td>13 (0)</td>
<td>Aweil South (5 cases) Aweil East (4 cases) Aweil West (2 cases) Aweil Town (2 cases)</td>
<td>Aweil hospital</td>
<td>Since 2 Feb 2018, at least 13 suspect cases have been admitted in Aweil hospital. Of the 5 susp. Cases from Aweil South, one tested positive for Gram positive diplococci; one case from Aweil East was positive for <em>Streptococcus pneumoniae</em> by rapid pastorex; &amp; one case from Aweil East was also positive for <em>Streptococcus pneumoniae</em> by rapid pastorex. All admitted to Aweil hospital with average age of 5.9 years (range 6 months to 12 years); 7 (58%) female.</td>
</tr>
<tr>
<td>6 Jan 2018</td>
<td>Meningitis</td>
<td>02 (00)</td>
<td>Abyei and Twic</td>
<td>Rumkor and Pan-nyok</td>
<td>The two suspect cases were treated in Agok hospital on 4 Jan and 29 Jan respectively with initial diagnoses of severe malaria but final diagnosis was bacterial meningitis. Rapid pastorex testing sample from the second suspect case from Twic county was positive for <em>Streptococcus pneumoniae</em>.</td>
</tr>
<tr>
<td>14 Feb 2018</td>
<td>meningitis</td>
<td>15(03)</td>
<td>Wau (Jur River)</td>
<td>Udici, Roc Roc Dong</td>
<td>Since 14 Feb; 15 suspect meningitis cases have been reported from Wau county. A suspect case involving a 45 year old male from Jur River was admitted in Comboni hospital on 28 Feb 18. PCR testing was positive for <em>Streptococcus pneumoniae</em>. Two suspect cases reported in wk 15 &amp; 16 - one tested positive for NmA by rapid pastorex at NPHL on 27/4/18.</td>
</tr>
<tr>
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</tr>
<tr>
<td>16Mar2018</td>
<td>Measles</td>
<td>08(01)</td>
<td>Mayom</td>
<td>Riak &amp; Lol Maroal</td>
<td>Suspect measles cases reported from Riak payam in Nyebola village since 9 Mar 2018. Four samples were obtained by MSF-CH for testing. Three of the four samples tested were positive for rubella IgM.</td>
</tr>
<tr>
<td>16Feb18</td>
<td>Health effects of petroleum drilling</td>
<td>Unspecified</td>
<td>Pariang</td>
<td>Pariang</td>
<td>A newswire indicates the Mayor of Pariang in Ruweng State has appealed to the Ministry of Health to establish some health conditions affecting people in the oil producing area. bit.ly/2EIndTP #SouthSudan. Initial verification details to follow</td>
</tr>
<tr>
<td>31Mar2018</td>
<td>Suspect meningitis/malaria</td>
<td>12(08)</td>
<td>Gogrial West</td>
<td>Kuach South</td>
<td>On 28th Mar 2018; the Director Gogrial West reported community deaths in Kuach South that were verified by the RRT on 29 Mar 2018. The clinical and lab tests on suspect cases were consistent with malaria and the cases responded to treatment with ACTs. All the deaths were 10 years and above and 50% of the deaths were 20 years and above. Given the dramatic nature of symptoms, the other differential diagnosis to keep an eye on is epidemic meningitis. No new cases reported in weeks 14 and 15.</td>
</tr>
<tr>
<td>12/Apr/18</td>
<td>pertussis</td>
<td>18(00)</td>
<td>Fangak</td>
<td>Bei</td>
<td>Suspect pertussis cases have been reported by Mandeang PHCU and Kuephone PHCU in Fangak county. At least 11 suspect cases have been reported from Bei payam and another 7 suspect cases from Jiath. The response instituted by the partner CMA - entails treatment of cases and prophylaxis to close contacts and enhancing routine immunization for the infants.</td>
</tr>
</tbody>
</table>
This bulletin is produced by the Ministry of Health with Technical support from WHO

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Notes

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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