Situation Update

A total of 14 counties in 9 (28%) of 32 states countrywide have confirmed cholera outbreaks (Table 1; Figure 1.0). Suspect cholera cases are being investigated in Padiet, Dorok, Mamour, Dongchak, and Amiel in Duk; Kalagany and Paroj in Kodok; and Jachor, Nyawit, Pagil, Gorwai, and Pajiek in Ayod (Table 4). During week 14 of 2017, two samples from Malakal tested negative for *Vibrio cholerae* (Table 3). Cumulatively, 207 (38%) samples have tested positive for *Vibrio Cholerae inaba* in the National Public Health Laboratory as of 7 April 2017 (Table 3).

Table 1: Summary of cholera cases reported in South Sudan as of 7 April 2017

<table>
<thead>
<tr>
<th>Reporting Sites</th>
<th>New admissions WK 14</th>
<th>New discharges WK 14</th>
<th>New deaths WK 14</th>
<th>Total cases currently admitted</th>
<th>Total facility deaths</th>
<th>Total community deaths</th>
<th>Total deaths</th>
<th>Total cases discharged</th>
<th>Total cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jubek – Juba</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>8</td>
<td>19</td>
<td>27</td>
<td>2018</td>
<td>2045</td>
<td></td>
</tr>
<tr>
<td>Jonglei-Duk</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>3</td>
<td>5</td>
<td>8</td>
<td>92</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Jonglei-Bor</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>4</td>
<td>5</td>
<td>82</td>
<td>87</td>
<td></td>
</tr>
<tr>
<td>Terekeka</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>8</td>
<td>8</td>
<td>14</td>
<td>22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eastern Lakes – Awerial</td>
<td>24</td>
<td>33</td>
<td>-</td>
<td>25</td>
<td>2</td>
<td>10</td>
<td>12</td>
<td>713</td>
<td>750</td>
</tr>
<tr>
<td>Eastern Lakes – Yirol East</td>
<td>12</td>
<td>-</td>
<td>-</td>
<td>5</td>
<td>12</td>
<td>23</td>
<td>35</td>
<td>453</td>
<td>493</td>
</tr>
<tr>
<td>Imatong – Pageri</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>28</td>
<td>29</td>
<td></td>
</tr>
<tr>
<td>Western Bieh – Fangak</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>4</td>
<td>4</td>
<td>266</td>
<td>270</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northern Liech – Rubkona</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>7</td>
<td>2</td>
<td>9</td>
<td>1,167</td>
<td>1,176</td>
<td></td>
</tr>
<tr>
<td>Southern Liech – Leer</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>3</td>
<td>-</td>
<td>3</td>
<td>91</td>
<td>94</td>
<td></td>
</tr>
<tr>
<td>Southern Liech – Panyijar</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>20</td>
<td>4</td>
<td>24</td>
<td>477</td>
<td>501</td>
<td></td>
</tr>
<tr>
<td>Southern Liech – Mayendit</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>5</td>
<td>5</td>
<td>221</td>
<td>226</td>
<td></td>
</tr>
<tr>
<td>Central Upper Nile – Pigi</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>5</td>
<td>-</td>
<td>-</td>
<td>178</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>Central Upper Nile – Malakal</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0</td>
<td>-</td>
<td>-</td>
<td>19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>36</td>
<td>33</td>
<td>-</td>
<td>30</td>
<td>65</td>
<td>81</td>
<td>146</td>
<td>5,819</td>
<td>5,995</td>
</tr>
</tbody>
</table>

Highlights in week 14 of 2017:

1. In week 14, cholera cases were reported from Yirol East 12 cases (Guthom (5), Shambe (3) Other sites (4) and Mingkaman IDP settlement 24 cases (14 [58%] from sites 0, 1, & 2) Table 1.
2. Suspect cholera cases are being verified/investigated in Padiet, Dorok, Mamour, Dongchak, and Amiel in Duk; Kalagany and Paroj in Kodok; and Jachor, Nyawit, Pagil, Gorwai, and Pajiek in Ayod (Table 4).
3. The counties with active cholera transmission include Yirol East, and Awerial (Figure 1).
4. Results from the first round OCV campaign conducted in Bor PoC from 3rd to 4th April 2017 show that 1,926 (85%) individuals aged one year and above were immunized.
As seen from Figure 1, while cholera outbreaks have been confirmed in 14 counties, active transmission is currently ongoing in Yirol East and Awerial counties. Suspect cholera cases are being investigated in Duk, Ayod, and Kodok counties.

Figure 1.0: Cholera incidence (cases per 10,000) and case fatality rate (%) as of 7 April 2017

Figure 1.1: New cholera cases admitted by location in week 13 and 14 of 2017
Figure 1.2: Cumulative cholera cases by state and county of residence as at 7 April 2017

Table 1.1: Cholera cases and deaths by state and county as of 7 April 2017

<table>
<thead>
<tr>
<th>State</th>
<th>County</th>
<th>Population at risk</th>
<th>Week 14</th>
<th>Weeks 24, 2016 to 14 of 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>New cases W14</td>
<td>Cases per 10,000 population</td>
</tr>
<tr>
<td>Western Bieh</td>
<td>Fangak</td>
<td>168,947</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>Northern Liech</td>
<td>Rubkona</td>
<td>126,976</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>Southern Liech</td>
<td>Leer</td>
<td>95,731</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>Southern Liech</td>
<td>Panyijiar</td>
<td>78,020</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>Southern Liech</td>
<td>Mayendit</td>
<td>97,127</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>Eastern Lakes</td>
<td>Awerial</td>
<td>114,837</td>
<td>24</td>
<td>2.09</td>
</tr>
<tr>
<td>Eastern Lakes</td>
<td>Yirol East</td>
<td>104,694</td>
<td>12</td>
<td>1.15</td>
</tr>
<tr>
<td>Imatong</td>
<td>Pageri</td>
<td>215,130</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>Jonglei</td>
<td>Bor South</td>
<td>331,611</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>Jonglei</td>
<td>Duk</td>
<td>96,259</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>Jubek</td>
<td>Juba</td>
<td>579,778</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>Terekeka</td>
<td>Terekeka</td>
<td>209,902</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>Central Upper Nile</td>
<td>Pigi</td>
<td>150,800</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>Central Upper Nile</td>
<td>Malakal</td>
<td>214,679</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>2,584,491</strong></td>
<td>36</td>
<td>0.14</td>
</tr>
</tbody>
</table>

Cumulatively, **5,995** cholera cases including **146** deaths (65 facilities and 81 community) (CFR **2.44%**) have been reported in South Sudan involving **14** counties in **9** states since the initial case was reported on 18 June 2016 for Jubek state; 3rd July 2016 for Duk in Jonglei state; 14 July 2016 for Terekeka state, 15 August 2016 for Mingkaman in Eastern Lakes and Pageri in Imatong states; 10 August 2016 for Fangak in Western Bieh state; 29 September 2016 for Rubkona in Northern Liech state; 11 October 2016 for Leer; 22 October 2016 for Panyijiar in Southern Liech state; 10 October 2016 for Pigi in Central Upper Nile state; 7 October 2016 for Mayendit in Southern Liech state.
state; 30 January 2017 for Bor South in Jonglei state; 3 February 2017 for Yirol East in Eastern Lakes state; and 22 February 2017 for Malakal, in Central Upper Nile state (Figure 2.1 and Table 1.1).

**Figure 2.1 Epidemic curve for cholera cases in South Sudan, from 18 June - 7 April 2017**

![Epidemic curve for cholera cases in South Sudan](image)

**Figure 3.1 Cholera case distribution by gender and county 7 April 2017**

![Cholera case distribution by gender and county](image)

Overall, males and females are almost evenly distributed. The gender distribution of cholera cases by county is shown in Figure 3.1.
Children under 19 years constitute nearly 60% of the total cholera cases Figure 3.2. The age distribution of cholera cases by county is shown in Figure 3.3.

**Probable risk factors**

The probable risk factors fueling transmission include: using untreated water from the River Nile and water tankers; lack of household chlorination of drinking water; eating food from unregulated roadside food vendors or makeshift markets; open defecation/poor latrine use especially following the conflict.

**Other factors**

1. Due to the protracted nature of the crisis since 2013, there has been destruction of infrastructure and limited investments to improve social services to the general population as such, living conditions have deteriorated with declining access to safe water and sanitation amenities.

2. Due to the worsening, economic situation, the cost of accessing safe water from the water trucks has increased substantially thus forcing households to resort to unsafe water sources.

3. In Southern Liech, humanitarian access remained limited due to persistent hostilities that kept away partners and thus impeding the initiation of comprehensive and sustained cholera interventions to interrupt transmission and prevent widespread and protracted outbreak. Consequently, transmission has continued in
Southern Liech since late September 2016 with continued case spillovers to Bentiu, Panyiijiar, Awerial, and Bor South.

While WASH partners have endeavoured to improve access to safe water and sanitation in Bentiu PoC; the continued arrival of people into the PoC has remained a challenge. In addition, current transmission in Bentiu PoC is linked to an oxidation water pond that is being used for bathing, washing, swimming and sometimes to collect water for household use since its water is soft and considered more palatable by the local population. The pond therefore needs to be secured-off to stem the ongoing transmission and to prevent future outbreaks.

<table>
<thead>
<tr>
<th>Area</th>
<th>Details of the alert</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gorwai, Ayod County</td>
<td>At least 40 susp. cholera cases including one facility and five community deaths reported by RMF from Gorwai PHCC in Ayod county. Cases have been reported in Torch cattle camps along River Kier.</td>
<td>RMF team is on the ground to support investigations and response. Preliminary tests showed one RDT positive case. Shortage of supplies is main hindrance to the response otherwise rapid response teams are ready to move to cattle camp areas in Torch as soon as supplies are delivered.</td>
</tr>
<tr>
<td>Pajie, Ayod</td>
<td>Suspct cholera cases reported in Buol cattle camps. At least 35 suspect cases including 23 death reported since 29 Mar 2017</td>
<td>WHO/MoH is provided training and cholera supplies to CMD and Jiech CHD to investigate and respond to the suspect cases. Samples collected and shipped to Juba for microbiological culturing.</td>
</tr>
<tr>
<td>Mamour, Dorok, Dongchak, Amiel, and Padiet in Duk county</td>
<td>At least 250 suspct cholera cases including 29 deaths (28 community and 1 HF) have been reported from Mamour cattle camp, Amiel, Dorok, Padiet in Duk county since 30 March 2017</td>
<td>Current response is led by CHD, SMC, AAID, MAGNA, &amp; JDF with support from Unicef and coordinated by the state taskforce. Temporary CTC is in Padiet Primary School while the ORP is in Amiel Primary School. The cattle camp at Mamour is reported to have dispersed with most nomads heading towards Paktap. Further deployments of response teams from Juba and Bor are underway to augment the response</td>
</tr>
<tr>
<td>Juaibor clinic</td>
<td>CMA reported suspct cholera cases in Juaibor (cases managed at Juaibor PHCC that is managed by CMA) and Maijok. At least 87 cases with three deaths reported in Juaibor PHCC and 59 cases with no deaths reported in Maijok.</td>
<td>CMA is supporting case management at Juaibor clinic – with limited support. Other partners in the counties have been contacted to support the response. MSF has been supporting with supplies and deployed an assessment team from 18th to 25th March 2017. As of 5 April 2017, there were no cholera cases in Juaibor PHCC.</td>
</tr>
<tr>
<td>Ayor, Jochor, Nyawit, Pagil, and Haat</td>
<td>Suspect cholera cases reported in Ayor, Jochor, Nyawit, Pagil, and Haat</td>
<td>CMD has been asked to verify the reports and support the initial response and Save the Children is planning to send response teams. Plans are underway to deliver cholera supplies.</td>
</tr>
<tr>
<td>Kalagany, Nyisher, and Paroj, in Kodok</td>
<td>CHD-Kodok - reported six cases including one death of susp. Cholera reported from Kalagany village (3 cases: 1 death); Paroj village (two cases) presented to Kodok hospital</td>
<td>Emergency meeting convened by CHD on 4Apr2017 involving – ICRC, ICRC, MSF, WVI, &amp; Afecoet. Assessment team visited Kalagany and Paroj on 5Apr2017. A total of 23 suspct cholera cases line listed from Kalagany (8), Paroj (14), and Kom (1) with the earliest date of onset as 30 March 2017. Samples were collected and have been shipped to Juba. Health education provided to communities that had no access to safe water and sanitation.</td>
</tr>
</tbody>
</table>
**Cholera Response Activities**

Overall coordination of the cholera response at the national level is coordinated by the National cholera taskforce to review outbreak trends and progress of implementation activities. Sub-national cholera taskforce committees are coordinating the cholera response in Northern and Southern Liech, Yirol East, Mingkaman, Bor, and Malakal Town. In Bor, the cholera taskforce meets twice a week on Mondays and Fridays at 10:30 am at the SMOH meeting room.

Since mid-February 2017, there have been increasing reports of suspect cholera cases in cattle camps. As pastures reduce and seasonal water streams dry up during the dry season; the cattle camps gravitate and converge on the remaining water sources usually in the swampland areas along River Nile and other rivers where they use and share the same water with the animals and use the same water for defecation.

In the circumstances, when a cattle camp stumbles on water contaminated with the cholera bacteria; the transmission rates as seen from the cases and death rates can be high.

The affected cattle camps include Guthom in Yirol East, Jalle in Bor; Mamour in Duk-Padiet; Buol cattle camps in Ayod, and Torch cattle camps along River Kier in Ayod.

The Ministry of Health with support from the taskforce partners from Juba and Bor effectively responded to the cholera cases from the cattle camps in Jalle-Bor and no transmission is currently reported from the area. All cases were managed at Jalle PHCC, by MoH supported by partners – WHO, UNICEF, MSF, and other health and WASH partners.

In Guthom-Yirol East, an oral rehydration point (ORP) was set up by the CHD with support from CUAMM, IOM, UNICEF, WHO and partners. While cases continue to be reported from Guthom cattle camp, the transmission has reduced with only seven cases reported this week.

In Mamour cattle camp, Duk-Padiet, the initial cases were first reported on 30 March 2017. Response teams from SMC, AAID, MAGNA, and JDF supported by UNICEF and WHO moved in on 1 April 2017 to set up a response. SMC deployed a team of six medical staff to do case management of the new cases of cholera outbreak in Duk. The team comprises of a clinical officer, Medical Assistant, lab technician, and 3 nurses to respond to the outbreak of cholera in the area. The team left Bor at 7 am with ORS, Diarrheal Kit, 5 cholera beds on April 01st, 2017. SMC with support from Unicef set up 3 ORP in the areas of Dorok, Amiel, Padiet in respond to the new outbreak of cholera. Cholera treatment facilities have been set up in Padiet Primary School and Amiel Primary School to manage the cases. At least four cholera kits have been deployed to support the response. While the outbreak has not been confirmed and investigations are underway to determine the cause and extent of the outbreak, response teams have reported at least 250 suspect cholera cases including 29 deaths (28 community deaths and one health facility death) from the cattle camps in Duk Padiet, Dorok, Amiel, and Mamour. Response teams are planning to move to surrounding areas like Paktap where most of the nomads moved after the outbreak started in Duk-Padiet.

In Pajiek-Ayod, suspect cholera cases have been reported from in Buol cattle camps. At least 35 suspect cases including 23 death reported since 29 Mar 2017 – case verification is still ongoing by the CHD supported by CMD. The Ministry of Health with support from WHO trained response teams from CMD and RMF to respond to the cases in Gorwai and Jiech in Ayod. The teams were supported with cholera investigation kits and samples have been delivered to the laboratory for testing. MedAir has also completed investigations in the areas around Pagil-Ayod where no significant suspect cholera activity has been reported. WHO is planning to air lift cholera kits to Jiech, Gorwai, and Haat but the delivery has been delayed by authorization requirements and the absence good runways in Gorwai and Haat for big cargo carriers.

The Ministry of Health with support from WHO is also sending assessment and response teams to Duk and Ayod. The third team will also be sent to Eastern Lakes to augment the cholera response in Mingkaman where the contract of HLSS has expired yet there are cases being reported from the IDP settlement. In Juaibor-Fangak, CMD is the partner providing cholera case management with support from MSF-France. Ampile case management supplies are available and cases have reduced in Juaibor-Fangak. MSF-France has been supporting with supplies and deployed an assessment team from 18th to 25th March 2017. As of 5 April 2017, there were no cholera cases in Juaibor PHCC.
Following reports of suspect cholera cases in Kodok hospital an assessment constituted by the CHD, MSF, ICRC, WV, and AFENET visited the affected areas in Kalagany and Paroj on 5 Apr 2017. A total of 23 suspect cholera cases were line listed from Kalagany (8), Paroj (14), and Kom (1) with the earliest date of onset as 30 March 2017. Samples were collected and have been shipped to Juba. Health education was provided by the team to communities that have no access to safe water and sanitation.

**Complementary oral cholera vaccination**

Health Link with support from WHO and UNICEF conducted a two-day first round OCV campaign in Bor PoC from 3rd to 4th April 2017. A total of 1,926 (85%) individuals aged one year and above were reached. Vaccination will continue further for individuals who were not reached due to absenteeism as well as for new arrivals to the PoC.

Reactive oral cholera vaccination is slated for the week of 17 April 2017 in Mingkaman IDP settlement. The campaign in Bentiu PoC is still pending due to delayed delivery of vaccines that is attributed to delayed flight safety assurance.

**Social mobilization activities**

**Mass media activities**

UNICEF, MoH and partners are supporting a multipronged approach to community education and hygiene promotion in Malakal, Aerial, Yirol East, and Bentiu PoC site, where active transmission of cholera is still ongoing. About 1.4 million people nationwide are estimated to have been reached with educative programs on cholera signs and symptoms for early reporting and referrals through a network of 12 radio stations’ namely Spirit FM (YEI), Bahkita FM, City FM, Classic FM, Dream FM, Liberty FM, Jonglei FM, Mingkaman FM, Freedom Voice Torit, Eye Radio and Radio Miraya.

Moreover, additional street announcements through four public address systems continue to run, covering the residential areas surrounding the PoC sites in Juba and Malakal town.

Ministry of Health in collaboration with telecom companies Zain and Vivacell continue to broadcast cholera key messages through bulk-SMS with their subscribers. Additionally, the Cholera hotline (1144) has been activated and is currently responding to all calls as well as educating callers on cholera signs and symptoms.

**Social mobilization and response in Jonglei and Eastern Lakes**

UNICEF, MoH and partners continue to work with a network of over 500 trained community volunteers in all cholera hotspots. Since the beginning of the year, a total of 73,270 people in Jonglei have been reached with cholera prevention activities with the support of religious institutions and 1,051,608 individuals have been reached through community volunteers. In the process, 2,400 PUR sachets, 80,000 chlorine tabs, 1,266,556 packs of oral rehydration salts and 8,750 bars of soap have been distributed.

In Jonglei, UNICEF in partnership with Community Development Organization Network CNDF, through 70 trained social mobilizers have reached 2,875 HHs (11,500 individuals) this week. This brings to a cumulative total of 7,384 households (35,870 individuals) reached with cholera prevention and control key messages in Bor town, Jalle, Twic East and Duk counties. The trained social mobilizers have also done other community engagement activities reaching a total of 46 schools with 9,992 pupils, 44 water point sessions with 2,758 people including water vendors and 1,520 people community leaders inclusive of local chiefs, religious and women and youth leaders sensitized on knowledge of cholera signs and symptoms for early reporting and referrals.

In Eastern Lakes State, UNICEF supported C4D partner CHADO, in collaboration with County Health Department (CHD) this week have reached 1,231 households (10,120 individuals) through 32 trained community volunteers. This brings the cumulative to a total of 15,943 HHs educated on cholera and diarrheal disease prevention and control. Furthermore, 50 schools and 9,280 pupils benefitted from school based interventions and 68 market sessions reached 3,216 people including food vendors. Additionally, 97 water point sessions reached 3,517 people including water vendors and 3,947 individuals benefitted from 75 community meeting in Aerial County including Mingkaman IDPs and Guthom.
Wash cluster cholera response updates

Lakes - Awerial:
- RUWASSA supported by UNICEF, HELP, and CRS are responding with hygiene promotion, distribution of soaps, chlorination of water points, installation and maintenance of hand washing facilities in the IDP settlements and host communities in Mingkaman.
- In Yirol East – HACO and CRS present in location and responding with hygiene promotion and distribution of WASH NFIs.

Jonglei - Duk:
- The WASH partners present and supporting the response in Duk are UNICEF, CRS, DRETCO.
- UNICEF is carrying out WASH cholera response in the CTC and community in Duk.
- WASH response teams have installed two hand washing points at entrance and exit area in CTC as well as in ORP. Established disinfection site in two locations within CTC and ORP.
- On job training for 4 sprayers from SMC staffs on how to use active chlorine to disinfect corpses, vomits, feces, washing floor, wall and feet, hand washing and washing utensils is ongoing.
- Regular disinfection of CTC/ ORP in which 27 patients and 26 attendants are being managed is ongoing.
- Training of CTC and ORP staff on how to treat water using chlorine tablets has been conducted.
- Discharged patients from nomadic cattle keeping communities are receiving WASH supplies including chlorine, soap and PuR water treatment tablets.
- Containers have been provided to facilitate management of human waste at the CTC.
- Two drums of HTH Chlorine powder (90kg) have been provided to support WASH activities at the CTC, ORP, and in affected communities.
- WASH cluster supplies have been transported to Duk with support from CRS. CRS with other partners is going to train people in hygiene promotion and water chlorination and these will eventually reach out to the cattle camps in the region.
- Oxfam: dug one hand well in dhiam-dhiam island and is still in the deployment site with 5 team members for 2 weeks conducting cholera response activities in 7 islands in Twic East including digging of 3 hand dug wells, WaSH/NFIs distribution and hygiene promotion.
- Oxfam distributed 3000 hygiene kits in seven islands of Duk.
- AAID teams are still deployed in the 17 islands of Duk doing hygiene promotion, where it has trained 34 hygiene promoters.
- Unicef: drilled three boreholes in Bor South and completed drilling of 5 boreholes in Padiet, Dorok, Ayueldit and Poktap of Duk County as well.
- CRS doing quick assessment for WASH and Nutrition in Duk.

Ayod County
- The WASH partner supporting the response in Ayod is CMD.
- Supplies have been requested by CMD from the WASH Cluster core pipeline. Log cluster support has been sought to transport these items to Ayod. CMD has trained hygiene promoters in Jiech CHD.
- Rapid response mission currently explored to support the response as more support of supplies and human resources required to some hard to reach areas.

Fangak/ Old Fangak;
- The WASH partners present and supporting the response are Nile Hope, Zoa, Christian Aid, ACF, ADA.
- Supplies has been requested by Cluster core pipeline. Log cluster support/ chartering of flight is explored to take these supplies to the affected location.

Kodok:
- The WASH partners present are World Vision, Solidarite International, and Cordaid.
- WASH partners will work with health partners to reach out to the affected locations.

Malakal, Bentiu and UN House POC: WASH Cholera activities are ongoing in the POCs as usual.

Challenges:
- Lack of established WASH partners with capacity for quick deployment and response in Ayod county.
- The affected locations in Yirol East, Old Fangak/ New Fangak, and Ayod are hard to reach due to either no motorable roads or access or security.
- The other main routes like Juba – Bor road are closed due to security.
- There significant delays in approval processes for charter flights.
- Logs cluster cargo tough from Juba where mostly items are stored.
- Due to fuel shortages, water treatment plant in Juba are not operating which is threatening increase in suspected Cholera AWD cases in Juba.

**Planned Activities/recommendations**

1. The next weekly EPR/cholera taskforce meeting is scheduled for 12 April 2017 starting 2:00pm in the WHO Conference Hall.
2. Roll out a comprehensive integrated response including oral cholera vaccination in response to the cholera outbreak in Malakal Town, Bentiu PoC, Mingkaman IDPs, and Bor PoC.
3. Continue with the ongoing response to the outbreaks in Mingkaman, Yirol East, Bor, Southern Liech, Northern Liech, and Pigi/Malakal Town in Central Upper Nile states.
4. Investigate and respond to the cholera alerts reported from Bor, Old Fangak, and Ayod.
5. Reactive oral cholera vaccination is slated for the week of 17 April 2017 in Mingkaman IDP settlement.

Many thanks to the staff at CTCs, MoH at national level and state levels, especially the Department of IDSR, who have helped to gather the information presented here. Situation Reports are posted on the WHO website: [http://www.who.int/hac/crises/ssd/sitreps/en/](http://www.who.int/hac/crises/ssd/sitreps/en/)

The MoH/WHO surveillance team welcomes feedback and data provided by individual agencies. Given the fast-evolving nature of this epidemic, errors and omissions are inevitable: we will be grateful for any information that helps to rectify these. Send any comments and feedback to: E-mail: outbreak_ss_2007@yahoo.com, The Toll-free number for Vivacell calls is: 1144.

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