Situation Report #83 on Cholera in South Sudan
As at 23:59 Hours, 12 September 2015

Situation Update
Today, two new cholera cases have been reported from Tongping (1) and Munuki (1) in Juba County.

As of 12 September 2015, 1,743 cholera cases including 46 deaths (CFR 2.64%) have been reported from Juba and Bor County in South Sudan. Of the 46 deaths (27 facilities and 19 communities), 11 (24%) occurred in children under five years. In Juba County, 1605 cases including 45 deaths (CFR 2.8%) from seven Payams (Table 1). In Bor, 138 cases including one death (CFR 0.72%) have been reported from Malou in Makuach Payam and other areas within the County. Tables 1 and 2.

Table 1. Summary of cholera cases reported in Juba and Bor Counties, 18 May - 12 September, 2015

<table>
<thead>
<tr>
<th>Reporting Sites</th>
<th>New admissions</th>
<th>New discharges</th>
<th>New deaths</th>
<th>Total cases currently admitted</th>
<th>LAMA*</th>
<th>Total facility deaths</th>
<th>Total community deaths</th>
<th>Total deaths</th>
<th>Total cases discharged</th>
<th>Total cases</th>
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<tr>
<td>CES - Juba County</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>218</td>
<td>26</td>
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<td>45</td>
<td>1338</td>
<td>1605</td>
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<td>3</td>
<td>214</td>
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<td>30</td>
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<td>1130</td>
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<td>98</td>
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<td>0</td>
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<td>0</td>
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<td>0</td>
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<td>13</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>70</td>
<td>70</td>
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<tr>
<td>Other sites in Juba</td>
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<td>0</td>
<td>0</td>
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<td>0</td>
<td>0</td>
<td>2</td>
<td>9</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>Jonglei State – Bor</td>
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<td>0</td>
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<td>134</td>
<td>134</td>
</tr>
<tr>
<td>Bor State Hospital</td>
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<td>0</td>
<td>134</td>
<td>134</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2</strong></td>
<td><strong>0</strong></td>
<td><strong>0</strong></td>
<td><strong>3</strong></td>
<td><strong>221</strong></td>
<td><strong>22</strong></td>
<td><strong>27</strong></td>
<td><strong>19</strong></td>
<td><strong>46</strong></td>
<td><strong>1472</strong></td>
</tr>
</tbody>
</table>

*LAMA: LEAVE AGAINST MEDICAL ADVICE; CES: Central Equatoria State

Table 2: Cholera cases by facility and week in Juba and Bor Counties, 18 May - 12 September, 2015

<table>
<thead>
<tr>
<th>Reporting Facility</th>
<th>New cases by epidemiological week of 2015</th>
<th>Grand Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>CES – Juba County</td>
<td></td>
<td>1605</td>
</tr>
<tr>
<td>JTH</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Juba 3 IMC clinic</td>
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<td>4</td>
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<tr>
<td>HLSS Nyakuron ORP</td>
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<td>HLSS Kator ORP</td>
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<td>0</td>
</tr>
<tr>
<td>MedAir Gumbo CTU</td>
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<tr>
<td>MedAir Gudele ORP</td>
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<td>0</td>
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<tr>
<td>HLSS Gurei ORP</td>
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<tr>
<td>HLSS Munuki ORP</td>
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<tr>
<td>HLSS Al Sabah ORP</td>
<td></td>
<td>0</td>
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<tr>
<td>HLSS Lolojo ORP</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>MSF Munuki CTC</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Other sites in Juba</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Jonglei State – Bor</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Bor State Hospital</td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>

In Juba County children under 10 years and those aged 20-34 years are the most affected while in Makuach Payam, Bor County, children under 10 years are the most affected. (Figures 1 and 2).
During week 37 of 2015 (week of 7-13 September 2015), majority of new cholera cases originated from Northern Bari (8) Payam followed by Munuki (4). Figures 3.

**Figure 1: Cholera case distribution by age in Juba County, 18 May - 12 September 2015**

![Cholera case distribution by age in Juba County, week 21-37, 2015](image)

*Male* | *Female*
--- | ---
under fives | 99 | 141
5-9 years | 81 | 103
10-14 years | 48 | 50
15-19 years | 58 | 98
20-24 years | 58 | 98
25-29 years | 82 | 46
30-34 years | 49 | 31
35-39 years | 27 | 22
40-44 years | 17 | 13
45-49 years | 2 | 9
50-54 years | 1 | 5
55-59 years | 13 | 5
60-64 years | 10 | 7
65-69 years | 1 | 4
70+ years | 11 | 5

*There are missing information in sex and age*

**Figure 2: Cholera case distribution by age in Bor County, 26 June - 12 September 2015**

![Cholera case distribution by age in Bor County, week 26-37, 2015](image)

*Male* | *Female*
--- | ---
under fives | 42 | 37
5-9 years | 8 | 3
10-14 years | 1 | 1
15-19 years | 1 | 1
20-24 years | 1 | 1
25-29 years | 10 | 2
30-34 years | 2 | 1
35-39 years | 1 | 1
40-44 years | 1 | 1
45-49 years | 2 | 1
50-54 years | 2 | 1
55-59 years | 2 | 1
60-64 years | 1 | 1
65-69 years | 1 | 1
70+ years | 1 | 1

**Figure 3: New cholera cases by residence during week 37 of 2015, 7-12 Sept 2015**

![New cholera cases by residence during week 37 of 2015, 7-12 Sept 2015](image)

As of 12 September 2015, of the seven affected payams of Juba County, the sites reporting the highest number of cholera cases included Northern Bari, Munuki, Rejaf, Kator and Juba. In Bor County, majority of the cases originated from Malou, Langbar, Achingdii, Arek, and Hai Salam in Makuach Payam. Figure 4 and 5
As seen from Figures 6 and 7, sustained and consistently increasing community transmission was observed in Juba from the 6 June 2015 (epi week 23) with two transmission peaks in week 27 and 29. Cholera cases
have been declining since 20 July 2015 (epi week 30). This decline was interrupted in week 33 with an increase of cases registered. This rising trend in Juba during week 33 was driven by community transmission in Gondokoro, Northern Bariri, Munuki, and Rejaf Payams. Since week 34 a decline trend of cases observed.

In Bor, the initial case occurred on 26 June 2015 (epi week 26) with increasing number of cases from week 26 to week 27 when the highest transmission peak was registered. In the subsequent weeks, successively shorter transmission peaks were registered, a trend that is consistent with declining community transmission.

**Figure 6: Epidemic curve for cholera cases in Juba and Bor, 18 May - 12 September 2015**

The probable risk factors fueling transmission include: residing in a crowded IDP camp with poor sanitation and hygiene; using untreated water from the Water tankers; lack of household chlorination of drinking water; eating food from unregulated roadside food vendors or makeshift markets; open defecation/poor latrine use; and attending/eating food at a funeral.

**Laboratory updates**

Of the 139 specimens received from six states and cultured at National Public Health Laboratory in Juba:

- 43 (30.9%) specimens were confirmed positive for *Vibrio cholera* Inaba group, 01 serotype
- 89 (84%) were negative
- 3 (2.2%) specimens results are still pending
- 4 (2.9%) rejected may be due to use of inappropriate sample container

No antibiotic sensitivity testing and isolation of other enteric bacteria done in the National Public Health Reference Laboratory in Juba. Specimens are sent to AMEREF in Uganda with support from WHO.
Response Activities this week

A. WASH
UNICEF provided Juba City Council with one month’s supply of HTH (Chlorine) for use at the 14 riverside water tanker filling stations.

B. Social Mobilization
1. Mass Media: Ongoing radio messaging through 22 radio stations with support from UNICEF. About 70% of the population reached with cholera prevention and control messages in Central Equatoria, Eastern Equatoria, Jonglei and Upper Nile States and Mingkaman IDP camp.
2. In Juba County
   - Central Equatoria SMOH with support from UNICEF: 151 trained Social Mobilizers covered 11,244 households with cholera prevention and control key messages and distributed 12,383 sachets of ORS; 1,179 bars of soap; 33,332 Aquatabs and 13,085 sachets of PUR.
   - South Sudan Red Cross: 84 trained volunteers reached 4,280 households and distributed 8,560 Sachets of ORS and 59,920 sachets of PUR in Gaida and nearby residences.
   - Cumulatively, 59,216 households (over 355,000 individuals) have been reached with cholera prevention and control messages and cholera household supplies.
3. In Jonglei State: UNICEF supported Bor, Twic East and Duk Counties
   - Social mobilizers reached 26,780 households with cholera prevention and control key messages in the affected areas. Through community meetings, 237 religious leaders, local chiefs, women and youth group members have been oriented. Through church announcements, over 50 churches and 23,500 individuals have been reached.
   - Social mobilizers engage by county health department, reached 20 schools with cholera messages

Planned and On-going Activities
1. The next national cholera taskforce meeting is scheduled for Monday 14 September 2015 at 10:00 am in the MoH Ministerial Boardroom.
2. The next cholera coordination meeting in UN House PoC is scheduled for 17 September 2015 at 11:30 am in the RRP Boardroom.

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/en/ as well as on the Humanitarian Info webpage: http://southsudan.humanitarianresponse.info/clusters/health.

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 numbers for alerts are: Zain: 0912000098

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