



Republic of South Sudan

## Cholera in Juba, Central Equatoria State, Republic of South Sudan

### Situation Report # 1 as at 23:59 Hours, 22 June 2015

#### Situation Update

As of 22 June 2015, a total of 189 cholera cases including 19 deaths (CFR 10%) have been reported from 44 villages in seven Payams of Juba County (Table 1).

The initial cases were traced back to 18 May 2015 in UN House PoC, which has reported the majority of the cases followed by New site, Mangatain IDP, Gumbo, and Gudele.

**Table 1. Summary of cholera cases reported in Juba County, 18 May –22 June 2015**

Reporting Sites	New admissions	New discharges	New deaths	Total cases currently admitted	LAMA*	Total facility deaths	Total community deaths	Total deaths	Total cases discharged	Total cases
UN House PoC clinic	0	0	0	5	0	0	1	1	14	22
Hai Referendum IDP clinic	0	0	0	0	0	0	1	1	0	1
Juba Teaching Hospital	17	12	0	45	11	7	2	9	83	148
Al Sabah Hospital	0	0	0	0	0	2	0	2	2	4
Morobo 2 clinic	0	0	0	0	0	0	1	1	3	4
Nyakuron PHCC	0	0	0	0	0	0	1	1	0	1
Juba Military Hospital	0	0	0	0	0	0	0	0	5	5
Luri Military	0	0	0	0	0	0	1	1	0	1
St. Kizito clinic	0	0	1	0	0	0	2	2	0	2
Mauna Medical clinic	0	0	0	0	0	0	1	1	0	1
<b>Total</b>	<b>17</b>	<b>12</b>	<b>1</b>	<b>50</b>	<b>11</b>	<b>9</b>	<b>10</b>	<b>19</b>	<b>107</b>	<b>189</b>

\*LAMA: LEAVE AGAINST MEDICAL ADVICE

#### Epidemiological updates

Fourteen new cholera cases were reported in Juba on 21 June 2015.

- All the new cases were reported by Juba Teaching Hospital
- One new community death was reported retrospectively by St. Kizito Medical clinic and occurred on 19 June 2015
- Cumulatively, 189 cholera cases including 19 deaths (nine facility and 10 community) have been reported since the initial case was reported in Juba on 26 May 2015 (Tables 1 and 2).

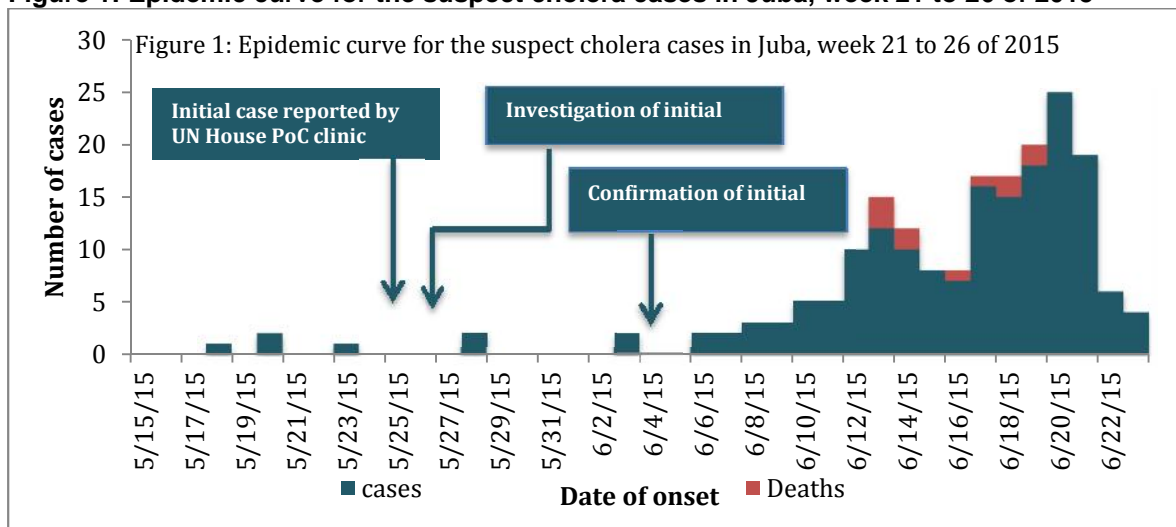
**Table 2: New cholera cases by week and facility in Juba, 18 May – 22 June 2015**

Reporting Facility	New cases by epidemiological week of 2015						Grand Total
	21	22	23	24	25	26	
Al Sabah hospital				4			4
Hai referendum IDP clinic				1			1
JTH		2	2	31	96	17	148
Juba 3 IMC clinic	4		4	9	5		22
Juba Military hospital				5			5
Morobo 2 clinic			1	3			4
Nyakuron PHCC				1			1
Luri Military				1			1
St. Kizito clinic					2		2
Mauna Medical Clinic					1		1
<b>Grand Total</b>	<b>4</b>	<b>2</b>	<b>7</b>	<b>55</b>	<b>104</b>	<b>17</b>	<b>189</b>

As seen from Figure 1, the initial and isolated cases were reported from UN House PoC starting 26 May 2015. However, following epidemiological investigations on 27 May 2015, cases could be traced back to 18 May 2015. Cholera was eventually confirmed on 1 June 2015 after *Vibrio cholerae inaba* was isolated from the one of five samples tested in the National Public Health Laboratory.

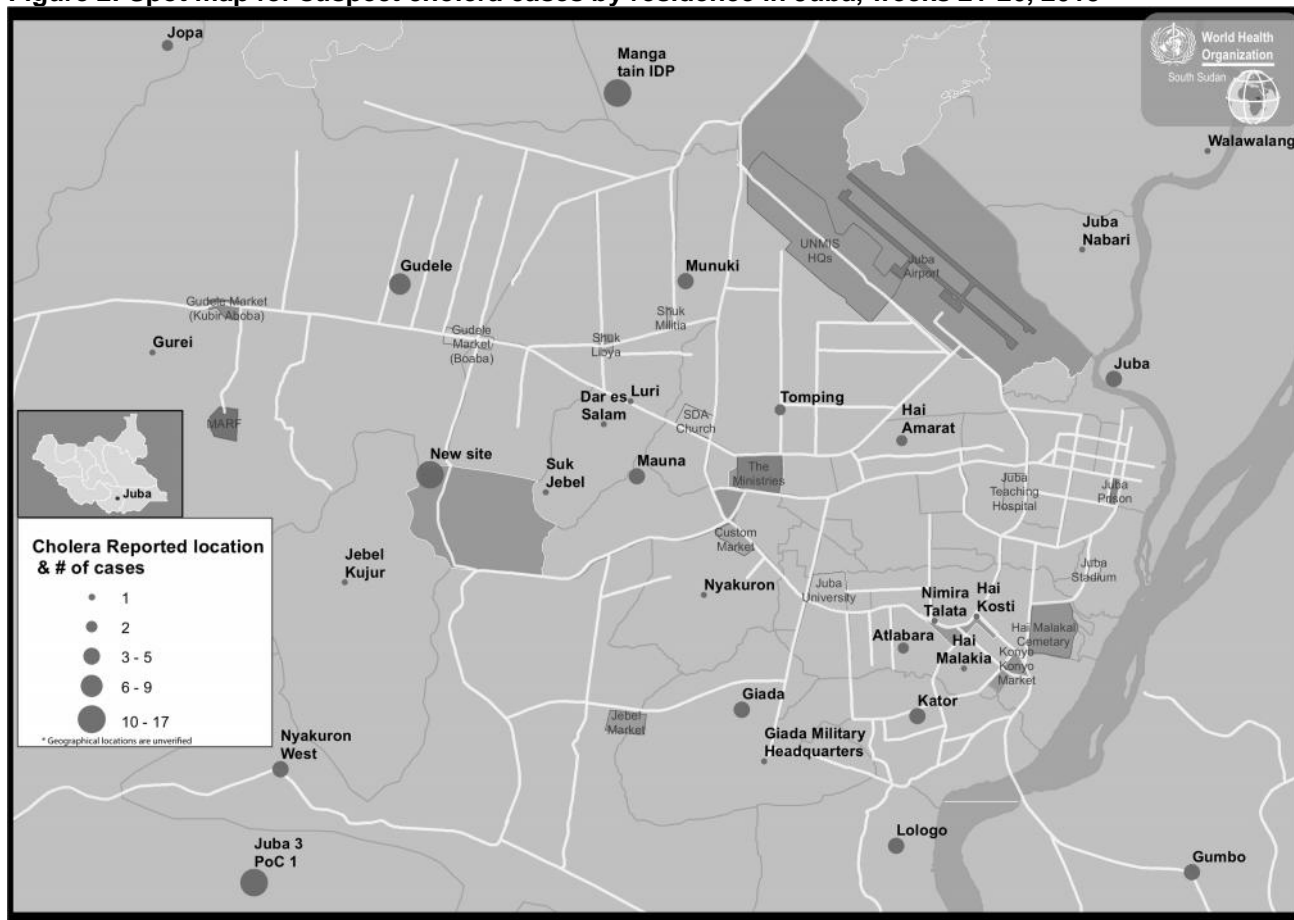
Since 6 June 2015, sustained and consistently increasing community transmission has been established with increasingly more suspect cases reported outside UN House PoC. There are two discernable transmission peaks with the initial peak of 15 cases occurring on 13 June 2015 while the subsequent and taller peak of 25 cases occurred on 20 June 2015 (Figure 1).

**Figure 1: Epidemic curve for the suspect cholera cases in Juba, week 21 to 26 of 2015**



Most of the suspect cholera cases in Juba have been reported from Juba 3 IDP, New site, Mangatain IDP, Gumbo and Gudele 1 (Figure 2).

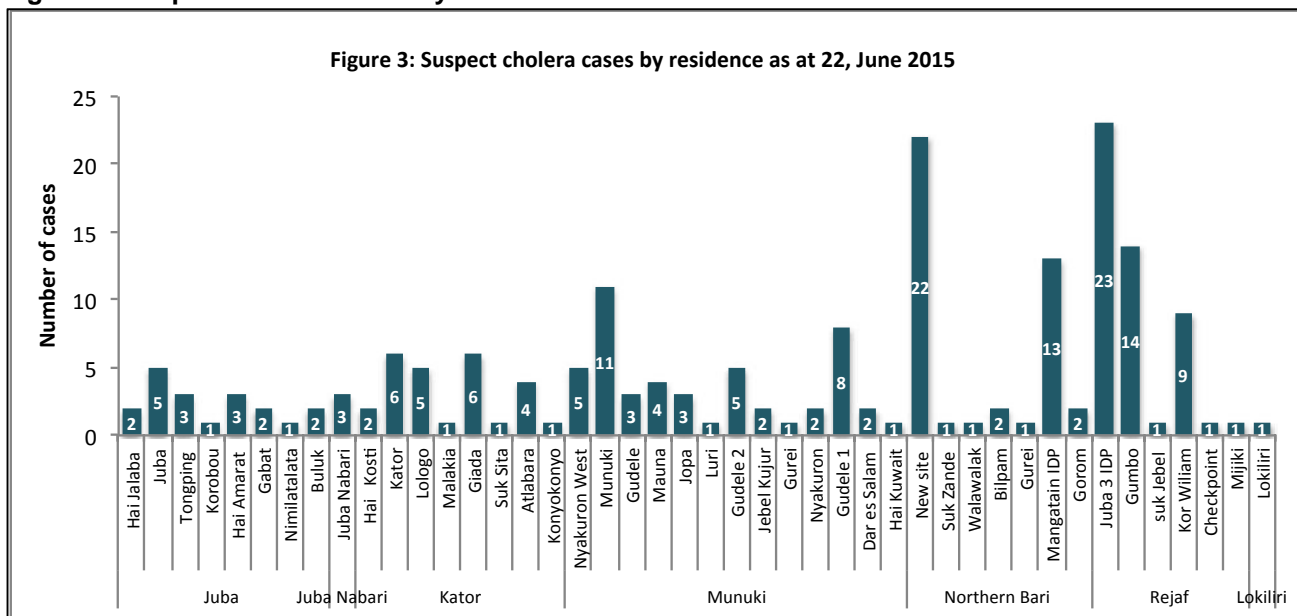
**Figure 2: Spot map for suspect cholera cases by residence in Juba, weeks 21-26, 2015**



As of 22 June 2015, the sites reporting the majority of the cases in Juba include UN House PoC, New site, Mangatain IDP, Gumbo, Munuki, and Kor William (Figure 3). There are satellite cases distributed in seven payams and 44 villages in Juba County.

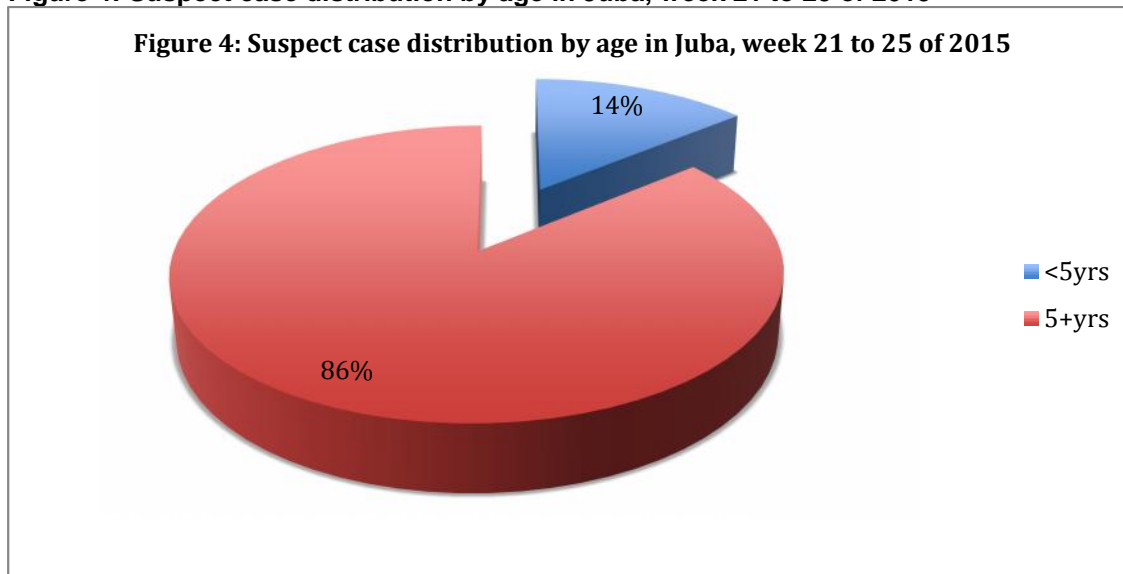
Intensive interventions in the form of social mobilization and health education, improving access to safe water, sanitation, and hygiene are therefore required to prevent further escalation in Juba and spread to other counties outside Juba.

**Figure 3: Suspect cholera cases by residence as at 22 June 2015**



- Out of the 182 suspect cholera cases with known age, 25 (14%) were children less than five years of age, while 157 (86%) were individuals five years and above (Figure 4).

**Figure 4: Suspect case distribution by age in Juba, week 21 to 25 of 2015**



Out of the 182 suspect cholera cases with known gender, 78 (43%) were females, while 104 (57%) were males (Table 3).

**Table 3: Case distribution by gender and age as at 22 June 2015**

Gender and age	N (%)
Female	78 (43)
<5yrs	9
5+yrs	69
Male	104 (57)
<5yrs	16
5+yrs	88

**Grand Total**

**182 (100)**

The probable risk factors identified 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 unsafe food from unregulated roadside food vendors; and eating food that has been prepared under unhygienic conditions at restaurants in the market.

### Laboratory updates

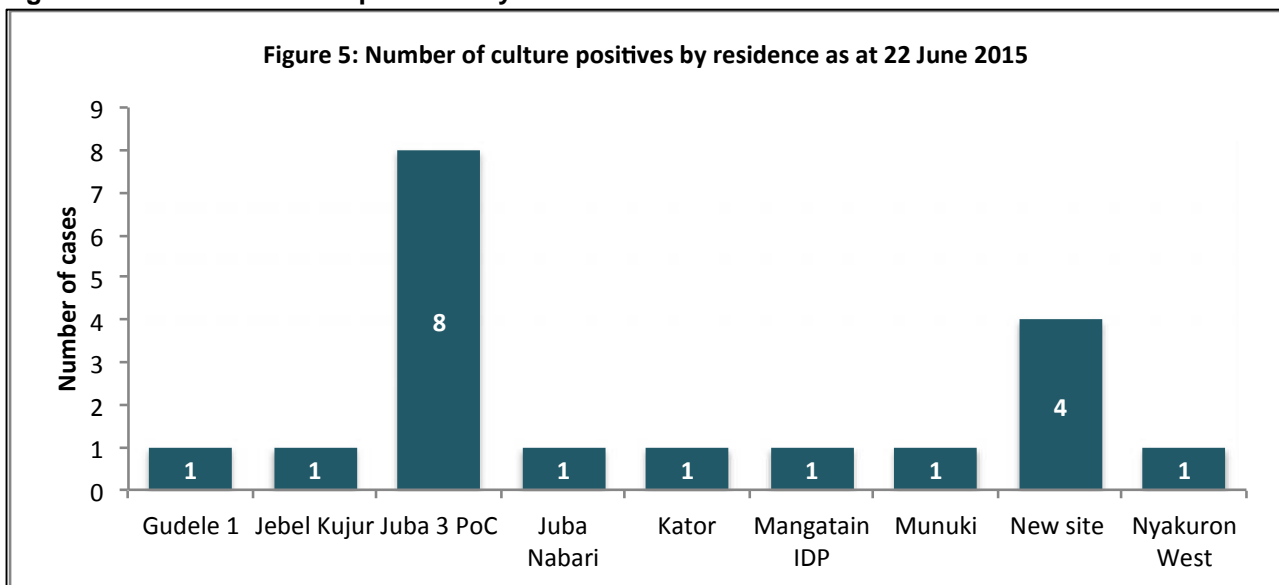
**Table 4: Cholera laboratory test results for Juba, 18 May – 22 June 2015**

	Health Facility	Number of sample collected	Number of cholera RDT positives	Number of cholera Culture positives
1	Al Saba hospital	2	0	2
2	Juba Teaching Hospital	40	24	7
3	Juba 3 PoC clinic	22	16	8
4	Juba Military Hospital	3	2	1
5	Morobo 2 clinic	2	2	1
	<b>Total</b>	<b>69</b>	<b>44</b>	<b>19</b>

A total of 69 stool samples have been collected from suspect cholera cases in Juba and submitted to the National Public Health Laboratory for testing (test results by facility shown in Table 4).

The National Public Health Laboratory has confirmed 19 cholera cases following the isolation on *Vibrio cholerae inaba*. Most of the culture confirmed cases have been reported from Juba 3 PoC and New site (Figure 5).

**Figure 5: Number of culture positives by residence as at 22 June 2015**



## **Updates on cholera response activities**

On 23 June 2015, the Ministry of Health declared an outbreak of cholera in Juba County. Following the declaration, the national cholera taskforce has been mandated to initiate concrete interventions for cholera preventions and control. Many of these interventions are already underway and were initiated as part of the preparedness activities in anticipation of a cholera outbreak. In this regard therefore, the National Cholera Taskforce under the stewardship of the Ministry of Health and line Ministries and with support from WHO, UNICEF, and WASH and health implementing partners initiated the following activities:

### **Coordination and preparedness**

1. To coordinate preparedness and response activities at all levels, the cholera taskforce was reactivated together with its four working sub-committees that include coordination, logistics and resource mobilization; surveillance, laboratory, case management and infection prevention and control, as well as oral cholera vaccination; social mobilization and health education; and WASH. The national cholera taskforce currently meets weekly to review outbreak data and progress of response interventions by each of the four working sub-committees. The sub-committees also meet weekly.
2. At state level, state taskforce committees were reactivated and state rapid response teams in Central Equatoria, Warrap, Northern Bahr el Ghazal, Lakes, Western Equatoria, and Eastern Equatoria underwent refresher trainings on cholera investigation and response during March and April 2015.
3. To facilitate rapid investigation and response to new outbreaks, cholera investigation and patient management kits adequate to treat at least 100 cholera patients with severe dehydration have been prepositioned in all states.

### **Surveillance, laboratory, case management, and infection prevention and control**

1. Drawing from the lessons learnt from the 2014 cholera outbreak, cholera response protocols for patient care, infection prevention and control, surveillance and laboratory have been updated to standardize and improve the quality of the response interventions.
2. Following reports on the initial cases in UN House PoC, the Ministry of Health conducted outbreak investigations with support from WHO and health partners starting 27 May 2015. As a result of these investigations, the initial outbreak case was confirmed in UN House PoC on 3 June 2015 and additional information was obtained in the intervening weeks to characterize the outbreak.
3. Subsequent to the initial outbreak investigations in UN House PoC and due to the need to conduct extended investigations in the PoC and in the rest of Juba, the Ministry of Health with support from WHO developed protocols for enhanced acute watery diarrhoea (AWD) surveillance in Juba.
4. To facilitate identification of suspect cholera cases using the cholera surveillance protocol, WHO donated rapid diagnostic test (RDT) kits to the state rapid response team and the IMC clinic in UN House PoC. As a result, 44 RDT positive and 19 culture positive cases have been confirmed from 69 samples collected in Juba since 27 June 2015.
5. Cholera treatment centers have been established in Juba Teaching Hospital and the International Medical Corps (IMC) clinic in UN House PoC to manage suspect and confirmed cholera cases. Medicines Sans Frontiers (MSF) Belgium has mobilized necessary requirements for a cholera treatment center in UN House PoC in the event of a full-scale outbreak. Satellite sites for setting up cholera oral rehydration points have been designated in New site, Gumbo, Gurei, Gudele, Nyakuron west, and Munuki in Juba County.
6. The Ministry of Health working with WHO and partners are conducting Oral Cholera Vaccination (OCV) campaigns in vulnerable areas of Bentiu and Juba targeting 73,360 and 33,565 respectively as a complementary measure to prevent a potential large-scale outbreak and prevent deaths. Alongside the current campaigns, WHO is supporting a prospective cohort study to assess the efficacy of the vaccine in different age groups.

### **Communication, social mobilization and health education**

1. The communications working group has revised its communications strategy to suit the context of the current outbreak.
2. As a result messages have been developed and disseminated to facilitate cholera prevention and control.
3. Messages and radio talk shows on cholera prevention and control are currently being aired on at least 12 FM radio stations in Juba.
4. Training of social mobilisers to conduct door-to-door health promotion is also underway in the most vulnerable areas.

### **Water Sanitation and hygiene**

1. The WASH cholera coordination-working group has been reactivated and bi weekly coordination meetings initiated to identify and support areas with inadequate access to safe water, sanitation, and poor hygiene.
2. An assessment of the functionality and water quality of the water sources has been commissioned in Juba to inform targeted response to improve access to safe water in high-risk areas.

3. An assessment of the quality of water supplied by water tankers to Mangatain IDP and New site, which are the most affected areas outside Juba 3 PoC showed either very low or negligible levels of free residual chlorine levels. It is therefore critical that chlorination of water tankers is reviewed and streamlined to ensure they supply safe water in Juba. In the same way, the public should be sensitized to use chlorinated water for cholera prevention.

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](mailto:outbreak_ss_2007@yahoo.com), **The Toll free numbers for alerts** are: **Zain: 0912000098**.

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