WHO Situation Report on the Emergency Response in South Sudan

### WHO
- **Surge Staff in the Country**: 5
- **Funding US$**: 22.8 % funded ($16.7M requested)

### Health Sector
- **Health Cluster Partners**: 60
- **Targeted Population**: 3.4M

### People Reached with Various Interventions
- **People Reached**: 1,723,330

### Health Facilities
- **Damaged/Not Functioning**: 214
- **Health Facilities Functioning**: 1,401

### Health Action
- **Consultations**: 1,693,930
- **Surgeries**: 1,294
- **Assisted Deliveries**: 7,843

### Vaccination Against
- **Polio**: 2,473,817
- **Measles**:

### Funding US$
- **Funded**: 70 % funded
- **Requested**: US$90M

---

**HIGHLIGHTS**

- Humanitarian access remains constrained, particularly in the areas where fighting is concentrated. Large populations remain in hiding, unable to access health services.

- The safety of humanitarian workers on the ground has become an increasing concern following the shooting of health workers in an ambush in Tonj South, Warrap State.

- One cholera case has been confirmed at UN House PoC after testing positive to laboratory tests (Culture).

- WHO is supporting Oral Cholera Vaccination campaigns in Bentiu and Juba PoCs, targeting more than 100,000 people.

- TB/HIV/AIDS, followed by AWD, perinatal death and severe acute malnutrition (SAM) are the most common causes of death among IDPs in 2015.
The security situation remains tense with continued fighting in parts of South Sudan as hostilities that resumed in April continue. Fighting is concentrated in sections of Unity and Upper Nile States, resulting in growing humanitarian needs and increased insecurity among workers in those areas.

In Unity State the security situation in Rubkona remains volatile as fighting for control of the oil fields continues. It is anticipated that the fighting could spill over to Bentiu hence humanitarian partners on the ground remain on high alert in anticipation of any deteriorating situation. An influx of internally displaced persons (IDP) into the Protection of Civilians (PoC) sites from neighbouring counties, with majority coming to Koch, has led to facilities and amenities at the camp being overstretched.

In Upper Nile State, the situation in Malakal town, including the PoC site, remains tense as fighting continues. Further, inter-ethnic tensions are threatening the security of some locally recruited aid workers.

Partners in Wau Shilluk, Upper Nile State, have reported that some 38,500 displaced people are in urgent need of clean water, sanitation and medical supplies. According to the WHO field team, a mission to Wau Shilluk is planned by Malakal team pending security clearance to use the river.

According to reports, Melut town has been partially burned and destroyed and assets looted. Approximately 800 new arrivals are in the Melut PoC and currently sheltered in the Women’s Center and temporary learning centres. Food, health, NFIs, clean water and sanitation are the identified needs. The movement of humanitarian partners in Melut remains restricted.

On 4 June unknown armed men ambushed a health mission to Manyang Ngok Primary Health Care Unit (PHCU) at Tonj South County, Warrap State, resulting in the death of the driver and severe injuries to three passengers who included a WHO employee and two international non-governmental organisation (INGO) staff. The team was on their way to deliver medical supplies to the health care unit. Subsequently, the INGO has withdrawn 19 health workers from the Tonj area and this will greatly affect the delivery of health services.

Although Eastern Equatoria State is calm with no major security threats, inter-ethnic tensions along Torit Hiyala payam following the shooting of a girl on 30 May have been reported. Western Equatoria State remains tense due to the ongoing clashes and a key road through Mundri to Wau has been cut off hence affecting operations and land deliveries to the greater Bahr El Ghazal states.

According to the April Integrated Food Security Phase Classification (IPC) analysis, an estimated 4.6 million people have been classified severely food insecure (3.6 million in Crisis and 1 million in Emergency) in May to July 2015 as the lean season progresses. The majority of these populations are located in the three conflict affected states of the Greater Upper Nile region and most parts of the Greater Bahr el Ghazal.

Basic health services have been disrupted: Extensive disruption of essential primary and secondary health care services due to the conflict has aggravated the limited capacity for basic service delivery. April and May have seen the most serious clashes in Upper Nile and Unity States, as well as escalated tensions along the Sudan-South Sudan border. Over 57% of the health facilities in the conflict affected states have either been looted or destroyed and remain non-functional thereby reducing access to much needed health care services. Consequently, preventative care, vaccination campaigns and cold chain capacity are compromised. Reproductive health services and psychosocial services are inadequate.
More than 4.6 million people face severe food insecurity, especially in greater Upper Nile region. Global Acute Malnutrition (GAM) levels are above the emergency threshold in close to 80% of counties in the three conflict states of Jonglei, Unity and Upper Nile, while Warrap and Western Bahr El Ghazal states remain at critical GAM levels.

With the rainy season approaching, an increase in morbidity and mortality due to waterborne infectious diseases is expected in the areas that have reported displacements given the dire living conditions. Flooding in most counties will further aggravate the health situation. Displaced populations continue to live in swamps, with inadequate shelter and poor sanitary conditions that prompt them to drink swamp water, which predisposes them to waterborne diseases and malaria.

Due to the protracted crisis, chronic diseases like tuberculosis and HIV/AIDS have now emerged as significant causes of morbidity and mortality among IDPs. Trauma cases due to fighting continue to be reported.

**Disease burden among IDPs:** The five leading causes of morbidity among IDPs remain the same. Acute Respiratory tract Infections (ARI) is the leading cause followed by malaria, Acute Watery Diarrhoea (AWD), Acute Bloody Diarrhoea (ABD) and suspected measles. Since the beginning of 2015, altogether 367,645 consultations have been registered from 45 IDP sites that submitted weekly disease surveillance reports as part of the Early Warning Alert and Response Network (EWARN).

**Suspected measles:** As of week 22, altogether 392 suspected measles cases were investigated from nine states since January 2015 and are classified below.

<table>
<thead>
<tr>
<th>Classification</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suspected measles cases investigated</td>
<td>392</td>
</tr>
<tr>
<td>Laboratory confirmed Measles (IgM+) cases</td>
<td>23</td>
</tr>
<tr>
<td>Confirmed by epidemiological linkage</td>
<td>79</td>
</tr>
<tr>
<td>Clinically compatibles</td>
<td>194</td>
</tr>
<tr>
<td>Discarded</td>
<td>75</td>
</tr>
<tr>
<td>Pending for laboratory results</td>
<td>21</td>
</tr>
</tbody>
</table>

Rubella (IgM–Lab) confirmed cases are 32.

The annualized measles incidence rate is 60.2/1,000,000 population.

**Measles Outbreaks:** Ongoing clashes in three conflict affected states continue to fuel an influx of IDPs to PoC camps and other major towns. Consequently, three measles outbreaks have been investigated in Duk, Jonglei State; Rubkona, Unity State; and Maban, Upper Nile State since January 2015. Another potential outbreak has not yet been investigated because of insecurity in Fashoda County.

<table>
<thead>
<tr>
<th>Outbreak County</th>
<th>Status of Response</th>
<th>Children Vaccinated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duk County</td>
<td>Responded to in January during the SIADs and contained MCV and tOPV was conducted from 7 to 11 April.</td>
<td>20,948 children (89%) reached with MCV and 23,257 children (94%) with OPV.</td>
</tr>
<tr>
<td>Bentiu PoC camps</td>
<td>Mop up response targeting children under-15 years of age</td>
<td>687,126 children from all the five payams and four refugee camps aged 6 months to 14 years of age</td>
</tr>
</tbody>
</table>

1 For more details refer to: [http://www.who.int/hac/crises/ssd/epi/en/](http://www.who.int/hac/crises/ssd/epi/en/)
Suspected cholera: On 26 May 2015, a cluster of four suspect cholera cases was reported following investigations conducted jointly by the Ministry of Health with support from WHO and International Medical Corps (IMC) in UN House PoC. One of the four suspect cases was on 1 June confirmed to have cholera after *Vibrio cholerae inaba* was isolated at the National Public Health Laboratory. AWD surveillance has been enhanced following confirmation of the case. Consequently, eight additional suspect cases have been investigated in UN House PoC with five suspect cases testing positive using cholera rapid diagnostic tests (RDT). Out of the 12 samples that have been collected from suspect cases in UN House PoC, seven have been cultured in the laboratory (with one confirmed as cholera and six samples testing negative), while culture test results for five samples are pending.

A review of priority disease trends for UN House PoC (Figure 1) shows that acute watery diarrhoea is the third highest cause of morbidity. The AWD trend in UN House PoC has not registered any significant increase in the recent weeks and infact is lower when compared to the corresponding period of 2014 (Figure 2).

Outside UN House PoC, seven suspect cholera cases have been investigated with no RDT positive case, one ruled out following negative culture test, and culture test results for two suspect cases are pending.

Hepatitis E Virus: In week 22 of 2015, two HEV new cases were reported from Bentiu PoC while Mingkaman reported one new case. Hence the cumulative for HEV is 75 cases including one death (CFR 1.33%) in Bentiu and 148 cases including seven deaths (CFR 4.7%) in Mingkaman. Probable HEV cases have been reported from Lankien with a cumulative of 19 probable HEV cases being reported since week 35 of 2014. Response interventions by partners include supportive case management, targeted preventive interventions during antenatal visits, soap distribution, shock chlorination of boreholes, as well as house-to-house hygiene and sanitation promotion. However, with the recent influx of new IDPs into Bentiu, the barely
adequate WASH indices will continue to be stressed and with the onset of the rains, HEV transmission is likely to escalate in the coming weeks.

**Acute Flaccid Paralysis:** Since the beginning of 2015, a total of 135 AFP cases have been reported, although no new cases were reported in week 22. The annualized non-Polio AFP (NPAFP) rate (cases per 100,000 population children 0-14 years) is 4.49 per 100,000 population of children 0-14 years (target ≥2 per 100,000 children 0-14 years). All states have attained the targeted NPAFP rate of ≥2 per 100,000 children 0-14 years. The non-Polio Enterovirus (NPEV) isolation rate (a measure of the quality of the specimen cold chain) is 9% (target ≥10%). Stool adequacy stands at 96%, a rate that is higher than the target of ≥80%.

**Visceral Leishmaniasis (Kala-azar) Update:** From week 1 to date, a total of 1,862 cases and 61 deaths (CFR 3.3%) have been reported from 21 treatment centres in 2015. These comprise 1,477 (79.3%) new cases; 385 (20.7%) relapses/PKDL; and 53 (2.8%) defaulters. In comparison, 1,647 cases and 50 deaths (CFR 2.8%) had been reported from 15 treatment centres by the end of week 22 of 2014. These comprised 1,456 new cases; 191 relapses/PKDL; and 113 defaulters. WHO, in collaboration with the Ministry of Health and partners, continues to support enhanced surveillance, case management and interventions to interrupt transmission. Interventions include supporting implementing partners with case management supplies; training frontline healthcare workers on Kala-azar case management; support supervision of treatment facilities; supporting community sensitisation on Kala-azar; and distribution of long lasting insecticide treated nets (LLITN) in affected and high-risk areas.

**Mortality surveillance:** Prospective mortality surveillance and reporting is ongoing in the major IDP sites. At least 466 deaths have been reported among IDPs since the beginning of 2015. During this period, Bentiu PoC registered the highest number of deaths, followed by Malakal PoC and Juba 3 PoC. The most frequent cause of death during the reporting period was TB/HIV/AIDS, followed by AWD, perinatal death and severe acute malnutrition (SAM). However, the under-5 and crude mortality rates by IDP site remained below the emergency threshold during the reporting period.

<table>
<thead>
<tr>
<th>IDP site</th>
<th>Acute Jaundice/Syndrome</th>
<th>Acute watery diarrhoea</th>
<th>Cancer</th>
<th>Gunshot wound</th>
<th>Heart disease</th>
<th>Hypertension</th>
<th>Kala-Azar</th>
<th>Malaria</th>
<th>Maternal death</th>
<th>Measles</th>
<th>Perinatal death</th>
<th>Pneumonia</th>
<th>SAM</th>
<th>Septicaemia</th>
<th>TB/HIV/AIDS</th>
<th>Trauma</th>
<th>Others</th>
<th>Grand Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bentiu</td>
<td>1</td>
<td>16</td>
<td>7</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>10</td>
<td>8</td>
<td>2</td>
<td>14</td>
<td>6</td>
<td>1</td>
<td>13</td>
<td>23</td>
<td>1</td>
<td>3</td>
<td>171</td>
</tr>
<tr>
<td>Bor</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td>14</td>
<td>4</td>
<td>1</td>
<td>14</td>
<td>6</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>13</td>
<td>23</td>
<td>1</td>
<td>3</td>
<td>26</td>
</tr>
<tr>
<td>Juba 3</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>10</td>
<td>13</td>
<td>4</td>
<td>6</td>
<td>1</td>
<td>14</td>
<td>1</td>
<td>2</td>
<td>13</td>
<td>23</td>
<td>1</td>
<td>3</td>
<td>76</td>
</tr>
<tr>
<td>Malakal</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>10</td>
<td>13</td>
<td>4</td>
<td>14</td>
<td>11</td>
<td>47</td>
<td>7</td>
<td>1</td>
<td>13</td>
<td>23</td>
<td>1</td>
<td>3</td>
<td>101</td>
</tr>
<tr>
<td>Melut</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>10</td>
<td>13</td>
<td>1</td>
<td>1</td>
<td>7</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>13</td>
<td>23</td>
<td>1</td>
<td>3</td>
<td>48</td>
</tr>
<tr>
<td>Mingkaman</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>10</td>
<td>13</td>
<td>1</td>
<td>3</td>
<td>7</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>13</td>
<td>23</td>
<td>1</td>
<td>3</td>
<td>21</td>
</tr>
<tr>
<td>Akobo</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>10</td>
<td>13</td>
<td>1</td>
<td>1</td>
<td>7</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>13</td>
<td>23</td>
<td>1</td>
<td>3</td>
<td>19</td>
</tr>
<tr>
<td>Wau Shiluk</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>7</td>
<td>1</td>
<td>10</td>
<td>13</td>
<td>1</td>
<td>3</td>
<td>7</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>13</td>
<td>23</td>
<td>1</td>
<td>3</td>
<td>57</td>
</tr>
<tr>
<td>Grand Total</td>
<td>3</td>
<td>33</td>
<td>9</td>
<td>13</td>
<td>4</td>
<td>8</td>
<td>21</td>
<td>2</td>
<td>4</td>
<td>32</td>
<td>22</td>
<td>32</td>
<td>12</td>
<td>46</td>
<td>1</td>
<td>218</td>
<td>466</td>
<td></td>
</tr>
</tbody>
</table>

**Table 3: Causes of death by IDP site for weeks 1 to 22 of 2015**

Parts of Unity and Upper Nile states where fighting is concentrated remain inaccessible due to insecurity. Humanitarian partners are unable to move back to the counties to provide medical services, while patients are reluctant to come out of hiding to seek medical treatment from the limited available facilities.

There is a greater threat of communicable diseases like cholera breaking out in the affected counties.
Access to information about affected populations remains limited. Enormous gaps remain in the provision of life saving surgery, especially in the deep front areas affected by the crisis and limited capacities of the NGOs on the ground. Costs of delivering humanitarian assistance continue to sky rocket and market forces have negatively impacted on the humanitarian assistance. Operation costs have almost tripled in some key states.

The capacity of the Ministry of Health to deliver basic health services is limited and humanitarian actors continue to cover over 90% of the response even in non-crisis affected states. Human Resources in conflict affected states remain a major constraint, with local manpower non-available and unable to be deployed due to their ethnicity. Lack of payment of government health workers is also placing pressure on humanitarian partners.

Drug stock outs across the states and the anticipated country wide stock out of essential medicines in the coming three months remain a huge public health need.

**WHO action**

**Cholera Preparedness:** WHO has begun a series of Oral Cholera Vaccination (OCV) Campaigns in parts of South Sudan in concerted efforts to prevent a potential outbreak of the disease. The campaigns, targeted for Bentiu and Juba 3 PoC sites in June 2015, aim to prevent more cases and will complement other measures already in place. This is crucial given the approach of the rainy season in the endemic country.

In Unity State WHO supported the first round of the OCV campaign from 1 to 5 June, with preliminary administrative coverage data showing that 72,265 (98.5%) of individuals aged one year and above were vaccinated. WHO’s contribution included providing the vaccines, giving technical support including training 35 people comprised of vaccinators, mobilizers and team supervisors for the OCV campaign, as well as monitoring and evaluation of the campaign. Community leaders were fully involved in all stages of the preparatory phase to ensure success of the exercise. The second round of the campaign will be conducted two weeks after the completion of the first round.

In Central Equatoria, cholera coordination meetings are underway at the State Ministry of Health and in UN House PoC in response to the confirmed cholera case. Cholera preparedness and response plans and protocols are in the process of being updated to enhance readiness capacities at all levels. WHO supported the Ministry of Health to develop a protocol for enhanced AWD surveillance in Juba County. Subsequently, WHO supported orientation of the state rapid response teams and provided logistical support to facilitate the implementation of the protocol. Within UN House PoC, cholera response protocols have been activated following the confirmation of a cholera case on 1 June 2015. This includes enhancing surveillance and case management capacity, building awareness on cholera prevention, stepping up residual chlorine levels in drinking water, sanitation and hygiene promotion, and garbage collection. To complement these interventions, the first round of oral cholera vaccination is tentatively scheduled for 15 June 2015 targeting 33,565 individuals aged one year and above.

Disease surveillance has been enhanced in the PoC and health facilities in Juba County. Cary Blair and outbreak kits have been provided to health partners that support health services to ensure specimen from suspected cases are collected regularly. WHO continues to monitor and supervise the implementation of the preparedness activities. A Social Mobilisation and Communication Strategy has been developed to ensure the public is adequately informed to prevent the disease. Tools include radio talk shows and jingles, regular media updates, as well as distribution of information, communication and education (IEC) materials. Community leaders and social mobilisers

---

are among the channels being used.

**Southern Unity Response:** WHO supported the packaging of survival kits for the response to the mobile population in southern Unity. The delivery of survival kits is an innovative approach to reach the affected people in locations that cannot be reached through the existing emergency response models (including rapid, mobile and static response mechanisms), and where aid workers have been relocated and relief supplies looted. Over 4,400 kits (for 4,400 Households) were assembled and WHO provided nine Oral Rehydration Salts (ORS) module kits for this response.

In addition, WHO donated one Interagency Emergency Health Kit (IEHK) for 10,000 people for three months to World Relief to support the response in Koch. In addition, eight basic unit kits (for 8,000 people for three months) were donated to IRC for the response in Mayom, targeting Bouth and Wicok payams.

**In Unity State,** as part of continued efforts to strengthen HIV services in emergencies, a WHO consultant is providing on-the-job training for service providers involved in Prevention of Mother to Child Transmission (PMTCT) of HIV at different health facilities within the PoCs.

**In Eastern Equatoria State,** the Emergency Preparedness Plan has been activated with regular weekly meetings with the State Ministry of Health (SMOH) and partners as the onset of the rainy season poses the threat of AWD and cholera. Eastern Equatoria State faced a cholera outbreak in February 2015.

In **Western Bahr El Ghazal,** from 19 to 24 May, WHO participated in an Interagency Rapid Needs Assessment (IRNA) of Raja, Diem Jallab, Minamba and Boro Medina to establish the humanitarian needs of the IDPs. No significant health needs were documented as IDPs are being served by the health facilities in the area.

In Western Equatoria State, WHO conducted Integrated Disease Surveillance and Response (IDSR) Case Management training for 34 participants from 25 to 29 May 2015 for five western counties of Ezo, Nagero, Nzara, Tambura and Yambio counties. The training focused on the IDSR priority diseases.

**Core Services:** WHO continued to provide partners and MOH with various interventions including the delivery of drugs as part of core pipeline support. Support included Cary Blair media and test kits for investigating suspected cholera cases; Diarrhoea Disease Kits (DDK); measles test kits; and theatre gowns for the surgical management of people wounded in areas affected by fighting.

<table>
<thead>
<tr>
<th>Partners &amp; Coverage Area</th>
<th>Support &amp; Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>World Vision/Warrap</td>
<td>50 Cary Blair; 10 cholera test kits</td>
</tr>
<tr>
<td>World Vision/Western Equatoria State</td>
<td>25 Cary Blair; 5 cholera test kits</td>
</tr>
<tr>
<td>UNMISS Level II/Malakal/Upper Nile State</td>
<td>150 theatre gowns</td>
</tr>
<tr>
<td>IRC/Unity</td>
<td>8 Basic Unit Kits</td>
</tr>
<tr>
<td>National Public Health Laboratory/MOH/</td>
<td>2 measles test kits; 2 rubella test kits; supplementary reagents</td>
</tr>
<tr>
<td>IMC/UN House/ CES</td>
<td>1 Diarrhoea Disease Kit</td>
</tr>
</tbody>
</table>
Background of the crisis

The crisis in South Sudan is currently a Level 3 humanitarian emergency and began in Juba on 15 December 2013 following disagreements between the President, General Salva Kiir and former Vice President, Dr. Riek Machar. The crisis continues in parts of Jonglei, Upper Nile and Unity states, while Central Equatoria, Lakes, Warrap and Eastern Equatoria states are indirectly affected by virtue of hosting displaced populations from areas affected by conflict. Currently, about 1.52 million people are internally displaced, while about 564,563 are refugees in neighbouring countries.

Contacts:

Dr. Tarande Constant Manzila
WHO South Sudan Country Representative
Email: manzilat@who.int
Mobile: +211955036411
GPN: 39541

Dr. Allan Mpairwe
ODM Focal Point
Email: mpairwea@who.int
Mobile: +211955372370
GPN: 67507

Ms. Matilda Moyo
Communications Officer
Email: matilda.moyo@gmail.com
Mobile: +211955036439
GPN: 67518

The operations of WHO in South Sudan are made possible with support from the following donors:

[Logos of USAID, The Common Humanitarian Fund, Humanitarian Aid and Civil Protection, United Nations CERF, From the People of Japan]