Weekly Situation update on the Yellow Fever outbreak in Western Equatoria State, South Sudan

Date: 18 April 2024
Situation Report Number 038

Key Figures

<table>
<thead>
<tr>
<th>Key Figures</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Number of new suspected cases reported(^1) in the last 7 days</td>
<td>5</td>
<td>Cumulative number of suspected cases</td>
<td>112</td>
<td>Cumulative number of cases</td>
</tr>
<tr>
<td>Number of new deaths reported in the last 7 days</td>
<td>00</td>
<td>Cumulative number of suspected deaths</td>
<td>06</td>
<td>Cumulative number of laboratory-confirmed cases</td>
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Background:

On December 21, 2023, the Ministry of Health received notification of a suspected case of viral hemorrhagic fever from Yambio County, Western Equatoria State. The suspected case was a 24-year-old male from Kangura village in Gangura Payam, Yambio County, who presented symptoms including generalized body weakness, headache, epigastric discomfort, fever, vomiting of blood, and yellowish discoloration (jaundice) of the eyes.

The patient was immediately placed under isolation at the health facility, and a sample was collected for further investigation. Subsequent testing conducted on December 24, 2023, at the National Public Health Laboratory confirmed a positive diagnosis of Yellow Fever.

The National Ministry of Health of the Republic of South Sudan officially declared a Yellow Fever outbreak on December 24, 2023, following confirmation of the case. The Public Health Emergency Operation Center (PHEOC) was immediately activated to facilitate a comprehensive, pillar-based approach to control and contain the outbreak. A multi-disciplinary team comprising representatives from the Ministry of Health, WHO, and partner organizations at both national and subnational levels was deployed to conduct an extensive epidemiological investigation, active case search, community mobilization, and sensitization efforts in Gangura Payam (the epicenter), Yambio County, Western Equatoria State, as well as surrounding Payams and Counties.

Key highlights

Reporting period: 09 to 15 April 2024

- Five (05) new suspected Yellow Fever cases reported in the last 07 days. The suspected cases were reported from Yambio (3), Tambura (1) and Mvolo (1) counties.

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\(^1\) Number of cases detected in the last 7 days. This includes both at the health facility and community

\(^2\) Further verification by national rapid response team revealed the age of the index case to be 24 years rather than 18 years.
As of 15 April 2024, one hundred and ten (115) Yellow Fever cases (112 suspected and 3 confirmed) were reported from seven counties in Western Equatoria state: Yambio (57), Tambura (26), Nzara (11), Ezo (11), Ibba (04), Maridi (04) and Mvolo (02) Counties.

No new deaths were reported in the last 07 days.

A total of six (06) suspected deaths were reported\(^3\), giving a case fatality ratio of 5.2%.

The Honorable Minister for Health launched a reactive Yellow Fever vaccination campaign on 13 February 2024.

A total of 465,798 individuals, representing 77% of the targeted population in the five counties Yambio, Nzara, Tambura, Ezo and Ibba of Western Equatoria state vaccinated in Phase one and two.

Response activities (coordination, surveillance, laboratory, case management, risk communication and community engagement, vaccination, infection prevention and control etc.) are being reinforced by the State Ministry of Health and supported by partners (WHO, UNICEF, WVI-CGPP, CDTY, CMMB, Red Cross South Sudan, AMREF, JRS, IMA, and TRI-SS)

Activeness surveillance is being strengthened in states and counties bordering Tambura and Ibba through guidance from the Ministry of Health and the State Ministry of Health with support from partners (WHO, UNICEF, CARE, Johanitter, AFOD, and CORDAID).

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### Current updates

**Coordination**

- Coordination meetings with stakeholders and key partners have transitioned from daily to a weekly frequency at the national level. However, daily meetings continue to be held at the sub-national level for enhanced collaboration and communication.

**Surveillance, Laboratory, and Reporting**

- Five (05) new suspected Yellow Fever reported during the last 07 days.
- The suspected cases were reported from Yambio (3), Tambura (1) and Mvolo (1) counties.
- Cumulatively, one hundred and fifteen (115) Yellow Fever cases (112 suspected and 03 confirmed), including 6 deaths, were reported as of 15 April 2024, giving a case fatality ratio of 5.2%.
- All cases were reported from seven counties in Western Equatoria state: Yambio (57), Tambura (26), Nzara (11), Ezo (11), Ibba (04), Maridi (04) and Mvolo (02) Counties.
- Out of the cumulative 115 cases (112 suspected and 03 confirmed), females accounted for 51%, and males accounted for 49%.

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\(^3\) A death reported from Yambio with an onset of fever on September 15, 2023, was excluded as it did not meet the revised outbreak case definition.
Majority (74%) of the reported cases are 15 years and above, while 10% are noted to be among 1 to 4 years old.

Eighty (80) samples have been tested among which, 68 samples at the National Public Health Laboratory (NPHL) and twelve (12) by the EAC Mobile laboratory stationed in Yambio county.

Of the 80 samples tested, 3 tested positive and the 77 samples tested negative.

Twenty-three (23) were referred to the regional laboratory, Uganda Virus Research Institute (UVRI), Uganda, for further verification.

The Ministry of Health deployed the EAC Mobile Lab in Yambio/Western Equatorial State for enhancing the Laboratory testing capacities and laboratory surveillance.

Case management

- MSF-Spain provided healthcare workers with training on managing Yellow Fever cases. The training aims to enhance their knowledge and skills in effectively diagnosing, treating, and responding to Yellow Fever cases, ultimately leading to improved patient care.
- Health facilities in affected counties have been notified to screen and categorize individuals based on the outbreak case definition for suspected cases.
- An interim case management guide developed to support healthcare workers in the management of patients.

Risk communication and community engagement (RCCE)

- Partners continue to engage the community through their home health promoters and community key informants.
- Enhancing RCCE activities during church services and market days to sensitize community members on reporting suspected cases and preparing the yellow fever vaccination campaign is ongoing.
- Twenty-seven (27) healthcare workers oriented on Yellow Fever outbreak response focusing on risk communication and community engagement for vaccine uptakes (Tambura, Nzara, and Yambio).
- Radio spot broadcasting on Yellow Fever prevention and control continues to be produced.

Vaccination

- Mass vaccination conducted in two phases in March and April 2024 to reach five of the seven counties with suspected cases.
- A total of 465,798 individuals, representing 77% of the targeted population in the five counties Yambio, Nzara, Tambura, Ezo and Ibba of Western Equatoria state.
- Current Vaccine balance is 130,560 at national vaccine store and 23,400 doses at Yambio state Cold chain, however, back-hauling of vaccine balance to WES is ongoing.
- Discussion on going for mop up campaign in low performing Payams.
- WHO, MOH and the national bureau of statistic is planning to conduct a post campaign coverage survey to measure the quality of the reactive campaign.

Table 1: Vaccination status and coverage by county

<table>
<thead>
<tr>
<th>State</th>
<th>County</th>
<th>Target population (9 moths ++)</th>
<th>Total vaccinated</th>
<th>Coverage</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>WES</td>
<td>Yambio</td>
<td>226,864</td>
<td>165,790</td>
<td>73%</td>
<td>Completed</td>
</tr>
<tr>
<td>WES</td>
<td>Nzara</td>
<td>97,755</td>
<td>63,451</td>
<td>65%</td>
<td>Completed</td>
</tr>
<tr>
<td>WES</td>
<td>Tambura</td>
<td>82,080</td>
<td>58,827</td>
<td>72%</td>
<td>Completed</td>
</tr>
<tr>
<td>WES</td>
<td>Ezo</td>
<td>138,859</td>
<td>121,341</td>
<td>87%</td>
<td>Completed</td>
</tr>
</tbody>
</table>

4 vaccination coverage of Yambio, Nzara and Tambura counties changed following data cleaning
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<table>
<thead>
<tr>
<th>WES</th>
<th>Ibba</th>
<th>62,711</th>
<th>56,389</th>
<th>90%</th>
</tr>
</thead>
</table>

Table 2: Implementing Partners by Pillar

<table>
<thead>
<tr>
<th>Pillar</th>
<th>Partner supporting</th>
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<tbody>
<tr>
<td>Coordination</td>
<td>MOH, WHO</td>
</tr>
<tr>
<td>Surveillance</td>
<td>MOH, WHO and CGPP-WVI</td>
</tr>
<tr>
<td>Case Management</td>
<td>MOH, WHO, MSF-Spain, CMMB, and CGPP-WVI</td>
</tr>
<tr>
<td>Water, Sanitation, and Hygiene (WASH)</td>
<td>MOH, IOM, ICRC, CGPP-WVI, UNICEF, WHO</td>
</tr>
<tr>
<td>Infection Prevention and Control (IPC)</td>
<td>MOH, WHO</td>
</tr>
<tr>
<td>Risk Communication and Community Engagement (RCCE)</td>
<td>MOH, WHO, CGPP-WVI, UNICEF, CDTY, TRI-SS, CMMB, Red cross South Sudan</td>
</tr>
<tr>
<td>Vaccination</td>
<td>MOH, WHO, UNICEF, CGPP-WVI, AMREF, CMMB and CDTY, CRSO,HPF</td>
</tr>
<tr>
<td>Vector Control</td>
<td>MOH, and WHO</td>
</tr>
<tr>
<td>Logistics</td>
<td>MOH, WHO, UNICEF, MSF-Spain, WVI</td>
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</tbody>
</table>

Challenges

- Current Measles outbreak ongoing in Yambio, Nzara, Ibba and Tambura with responses been planned
- Lack of partners’ support to carry out vector control activities to reduce the risk of yellow fever transmission.

Next steps

- Improve on quality of campaign via strengthening supportive supervision
- Ensure daily data is uploaded to monitor campaign progress and make needed interventions
- Hold daily evening review meeting to assess the status of campaigns and support needed
- Strengthen analysis of surveillance data, active case search, and investigation of alerts.
- Capacity building for health workers on sample collection, packaging, transportation, case detection and case management and reporting.
- Engage more partners and other stakeholders for resource mobilization.

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- Plan and conduct a post-campaign coverage survey.