PUBLIC HEALTH EMERGENCY OPERATIONS CENTRE (PHEOC)
Weekly Situation update on the Yellow Fever outbreak in Western Equatoria State, South Sudan
Date: 21 February 2024
Situation Report Number 030

<table>
<thead>
<tr>
<th>Key Figures</th>
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</thead>
<tbody>
<tr>
<td>Number of new suspected cases reported(^1) in the last 7 days</td>
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<tr>
<td>Number of new deaths reported in the last 7 days</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\(^2\)-old male from Kangura village in Gangura Payam, Yambio County. The patient 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. In response, 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: 12 to 18 February 2024

- February 18, 2024, marks 60 days since the first case of Yellow Fever was confirmed in Western Equatoria, South Sudan.
- Seven (7) newly suspected Yellow Fever cases reported during the last 7 days. The cases were reported from Yambio (4), and Tambura (3), 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.
A cumulative total of seventy-one (71) Yellow Fever cases (68 suspected and 03 confirmed) were reported from six counties in Western Equatoria state: Yambio (37), Tambura (15), Nzara (09), Ezo (05), Ibb (04), and Maridi Counties (01) as of 18 February 2024.

No new deaths were reported during the last 7 days.

A cumulative total of six (06) suspected deaths were reported, giving a case fatality ratio of 8.5%.

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

Three (03) out of the five (5) counties have started the reactive Yellow Fever campaign.

A total of 221,279 individuals, representing 54% of the targeted population, have been vaccinated.

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

Active surveillance are being strengthened in state and counties bordering Tambura and Ibb through guidance from Ministry of Health and State Ministry of Health with support from partners (WHO, UNICEF, CARE, Johanitter, AFOD and CORDAID).

Current updates

Coordination

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

Surveillance, Laboratory, and Reporting

• Seven (07) new suspected Yellow Fever reported during the last 7 days. The cases were reported from Yambio county (4), and Tambura (3) county.

• Cumulatively, seventy-one (71) Yellow Fever cases (68 suspected and 03 confirmed) including 6 deaths were reported as of 12 February 2024, giving a case fatality ration of 8.5%.

• All cases were reported from six counties in Western Equatoria state: Yambio (37), Tambura (15), Nzara (09), Ezo (05), Ibb (04), and Maridi Counties (01) as of 18 February 2024.

• Out of the cumulative 71 cases (68 suspected and 3 confirmed) males accounted for 51% and females accounted for 49%.

• Majority (86%) of the reported cases are 15 years and above whilst 13% are reported to be among 1 to 4 years old.

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.
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- Fifty-six (56) samples have been received at the national public health laboratory (NPHL), among these, 51 have been tested, and 05 are pending, undergoing verification.
- Twenty-three (23) were referred to regional laboratory, Uganda Virus Research Institute (UVRI), Uganda for further verification.
- Only 03 samples of the 51 samples received and tested positive both that NPHL and UVRI.

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 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
- Accompanied by WHO, UNICEF, and other partners, the Honorable Minster for Health launched a vaccination Yellow Fever campaign for Yambio, Nzara, and Tambura on 13 February 2024.
- The reactive Yellow Fever vaccination campaign ended on 21 Feb 2024. However, the data will determine the need for mop-up and additional interventions as collation is ongoing.
- Available admin data shows 221,279 individuals, representing 54% of the targeted population vaccinated.
- The ICG has authorized an extra 223,743 doses of the Yellow Fever vaccine to be allocated for the remaining two counties of Ibba and Ezo counties, with planned dates to be discussed with the sMOH.
- UNICEF has initiated all necessary processes to ensure the arrival of the vaccines in the country before the third week of February.

Table 1: Vaccination status and coverage by county

<table>
<thead>
<tr>
<th>State</th>
<th>County</th>
<th>Target population (9 moshs ++)</th>
<th>Total male</th>
<th>Total female</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>44,163</td>
<td>51,445</td>
<td>95,608</td>
<td>42%</td>
<td>Ongoing</td>
</tr>
<tr>
<td>WES</td>
<td>Nzara</td>
<td>97,755</td>
<td>34,042</td>
<td>39,076</td>
<td>73,118</td>
<td>75%</td>
<td>Ongoing</td>
</tr>
<tr>
<td>WES</td>
<td>Tambura</td>
<td>82,080</td>
<td>23,663</td>
<td>28,890</td>
<td>52,553</td>
<td>64%</td>
<td>Ongoing</td>
</tr>
<tr>
<td>WES</td>
<td>Ezo</td>
<td>138,859</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Yet to commence</td>
</tr>
<tr>
<td>WES</td>
<td>Ibba</td>
<td>62,711</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Yet to commence</td>
</tr>
</tbody>
</table>

Implementing Partners by Pillar
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**Pillar** | **Partner supporting**
---|---
Coordination | MOH, WHO
Surveillance | MOH, WHO and CGPP-WVI
Case Management | MOH, WHO, MSF-Spain, CMMB, and CGPP-WVI
Water, Sanitation, and Hygiene (WASH) | MOH, IOM, ICRC, CGPP-WVI, UNICEF, WHO
Infection Prevention and Control (IPC) | MOH, WHO
Risk Communication and Community Engagement (RCCE) | MOH, WHO, CGPP-WVI, UNICEF, CDTY, TRI-SS, CMMB, Red cross South Sudan
Vaccination | MOH, WHO, UNICEF, CGPP-WVI, AMREF, CMMB and CDTY, CRSO,HPF
Vector Control | MOH, and WHO
Logistics | MOH, WHO, UNICEF, MSF-Spain, WVI

**Challenges**

- Failure to implement the approved micro plan at the state resulted in the distortion of the micro plan with fewer teams deployed during the reactive Yellow Fever vaccination campaign than required, resulting in low coverage.
- Lack of partners' support to carry out vector control activities to reduce the risk of yellow fever transmission.
- Limited partners are on the ground to support the response, especially RCCE activities in other counties.
- Community perceptions regarding patients with jaundice, particularly their preference for traditional healers.
- Limited capacity to manage severe cases at the available health facilities and difficulty in follow-up of suspected cases at home.
- Limited capacity at health facilities for sample collection, packaging, and transportation.

**Next steps**

- Discuss with the sMOH the need for a mop-up based on coverage data and timelines
- Continue updating the data provided by vaccination teams.
- 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.
- Plan and conduct a post-campaign evaluation campaign for the 3 counties that have already implemented the Yellow Fever vaccination campaign.

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