PUBLIC HEALTH EMERGENCY OPERATIONS CENTRE (PHEOC)

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

Date: 5 March 2024
Situation Report Number: 032

Key Figures

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of new suspected cases reported¹ in the last 7 days</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Cumulative number of suspected cases</td>
<td>78</td>
<td></td>
</tr>
<tr>
<td>Cumulative number of cases</td>
<td>81</td>
<td></td>
</tr>
<tr>
<td>Number of new deaths reported in the last 7 days</td>
<td>00</td>
<td></td>
</tr>
<tr>
<td>Cumulative number of suspected deaths</td>
<td>06</td>
<td></td>
</tr>
<tr>
<td>Cumulative number of laboratory-confirmed cases</td>
<td>03</td>
<td></td>
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</tbody>
</table>

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-year²-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: 26 February to 3 March 2024

- Three (03) new suspected Yellow Fever cases reported in the last 07 days. The cases were reported from Yambio (03) county.
- A cumulative total of eight-one (81) Yellow Fever cases (78 suspected and 03 confirmed) were reported from six counties in Western Equatoria state: Yambio (45), Tambura (15), Nzara (10), Ezo (06), Ibba (04), and Maridi Counties (01) as of 3 March 2024.
- No new deaths were reported in the last 07 days.

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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 total of six (06) suspected deaths were reported, giving a case fatality ratio of 7.4%.

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

Three (03) out of the five (05) counties completed the reactive Yellow Fever campaign.

A total of 357, 290 individuals, representing 87.9% 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 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).

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

Three (03) new suspected Yellow Fever reported during the last 07 days. The cases were reported from Yambio county.

Cumulatively, eighty-one (81) Yellow Fever cases (78 suspected and 03 confirmed), including 6 deaths, were reported as of 3 March 2024, giving a case fatality ratio of 7.4%.

All cases were reported from six counties in Western Equatoria state: Yambio (45), Tambura (15), Nzara (10), Ezo (06), Ibba (04), and Maridi Counties (01) as of 25 February 2024.

Out of the cumulative 81 cases (78 suspected and 03 confirmed), females accounted for 54%, and males accounted for 46%.

Majority (78%) of the reported cases are 15 years and above, while 12% are noted to be among 1 to 4 years old.

Sixty-eight (68) samples have been received at the National Public Health Laboratory.

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.
(NPHL); 64 have been tested, and 04 were rejected because the samples were inadequate.

- Twenty-three (23) were referred to the regional laboratory, Uganda Virus Research Institute (UVRI), Uganda, for further verification.
- Only 03 samples of the 68 samples received and tested positive. Of the 03 samples, 02 were positive at the NPHL and 03 at UVRI.
- 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**

- Yellow Fever campaign done in Yambio, Nzara, and Tambura with a mop done completed on 2 March 2024, data entry ongoing.
- Current data shows 357, 290 individuals, representing 88% of the targeted population, have been vaccinated.
- The balance of 223,743 doses of Yellow Fever vaccine for Ibba and Ezo arrived in the country on 27 Feb 2024.

**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>195,734</td>
<td>86%</td>
<td>Completed</td>
</tr>
<tr>
<td>WES</td>
<td>Nzara</td>
<td>97,755</td>
<td>90,025</td>
<td>92%</td>
<td>Completed</td>
</tr>
<tr>
<td>WES</td>
<td>Tambura</td>
<td>82,080</td>
<td>71,531</td>
<td>86%</td>
<td>Completed</td>
</tr>
<tr>
<td>WES</td>
<td>Ezo</td>
<td>138,859</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>Yet to commence</td>
</tr>
</tbody>
</table>

**Implementing Partners by Pillar**

<table>
<thead>
<tr>
<th>Pillar</th>
<th>Partner supporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coordination</td>
<td>MOH, WHO</td>
</tr>
<tr>
<td>Surveillance</td>
<td>MOH, WHO and CGPP-WVI</td>
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</tbody>
</table>
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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, and 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
- Delay in data reporting (coverage, AEFI, Vac balance etc.), resulting in inadequate data for action.
- VPDs outbreaks (Polio, Measles) ongoing with planned responses competing with the YF response.
- 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
- Tentative date for the remaining two counties is 18 March 2024, and this allows a week gap after the polio campaign
- 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 03 counties already implemented the Yellow Fever vaccination campaign.

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