**Republic of South Sudan**

**Measles Outbreak and Response Weekly Situation Update**

**Issue number** 24  
**Issue Date** 10 August 2023  
**Epidemiological week** Week 31 (July 31 – August 06, 2023)

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### Suspected Measles Cases

- **New (11) cases with date of onset in week 31**
- **Cumulative (9,392)**

### Lab Confirmed Cases

- **New (0) cases**
- **Cumulative (790)**

### Deaths

- **New (1) death**
- **Cumulative (168)**

* Above data is cumulative from 2022

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**Background**

A total of 5,244 suspected Measles cases reported with 398 (7.3%) lab confirmed, and a case fatality of 2.4/100 cases for 2023.

The Measles campaign was concluded in May 2023, EPI week 20, with a decline in cases, after which movement of people due to the Sudan crisis started.

This crisis contributed to another round of outbreaks and from EPI week 25 (4 weeks after the last Measles campaign) a total of 1,618 cases have been reported with 23% being returnees.

In the last 4 weeks, three (3) counties have had a confirmed outbreak and twelve (12) continue to report suspected cases.

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### Key weekly Situation Update as of 06 August 2023

- Eleven (11) newly suspected cases were reported this week from Renk, and 335 cases from previous weeks.
- No laboratory-confirmed case has been reported since week 28.
- One (1) new death in the reporting week from Renk plus 32 deaths in previous weeks, including other locations.
- There are currently three (3) counties (Aweil Center, Twic, and Longochuk) with laboratory-confirmed outbreaks from week 28.
- Longechuk outbreak: An intra-action review was conducted, and the two leading causes identified for cases and deaths are Measles and Malaria. Out of 39 samples collected, 25 and 31 tested positive for measles and malaria and 19 deaths.
- Renk, Ulang, Yei, Panyijar, Koch, Fangak, Guit, Rubkona, and Aweil North are still reporting suspected cases and need to collect samples for confirmation to guide the response.
Republic of South Sudan
Measles Outbreak and Response Weekly Situation Update

Summary of cases as of 06 August 2023

Table 1: Yearly distribution of cases by final classification

<table>
<thead>
<tr>
<th>FINAL CLASSIFICATION</th>
<th>2022</th>
<th>%</th>
<th>2023</th>
<th>%</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lab confirmed</td>
<td>392</td>
<td>9.5</td>
<td>398</td>
<td>7.3</td>
<td>790</td>
</tr>
<tr>
<td>Epi-linked</td>
<td>2,825</td>
<td>68.3</td>
<td>1,307</td>
<td>24.9</td>
<td>4,132</td>
</tr>
<tr>
<td>Clinically Compatible</td>
<td>391</td>
<td>9.5</td>
<td>3,367</td>
<td>6.2</td>
<td>3,758</td>
</tr>
<tr>
<td>Total</td>
<td>3,608</td>
<td>87.2</td>
<td>5,072</td>
<td>96.7</td>
<td>8,680</td>
</tr>
<tr>
<td>Discarded (-ve)</td>
<td>529</td>
<td>12.8</td>
<td>172</td>
<td>3.3</td>
<td>701</td>
</tr>
<tr>
<td>Grand Total</td>
<td>4,137</td>
<td>100.0</td>
<td>5,244</td>
<td>100.0</td>
<td>9,392</td>
</tr>
</tbody>
</table>

Out of the 9,392 suspected measles cases, 790 (8.4%) are lab-confirmed, 4,132 (44%) epi-linked, 3,758 (40%) clinically compatible, and 701 (7.5%) discarded cases have been reported from epidemiological week 1, 2022, to week 31, 2023. A total of 211 rubella positive cases from the discarded (negative measles cases) have been reported since epidemiological week 1, 2022, to week 31, 2023. A total of 168 measles-related deaths were reported since January 2022, with only 3 deaths among the lab-confirmed measles cases and 46 among the epi-linked cases.

Figure 1: Deaths by year and final classification

Note: Measles cases have been reported from different counties throughout 2023. The observed peaks are driven by different counties that experienced a surge in measles cases at different times. The Sudan crisis started in week 14 with the influx of returnees and refugees since then. The nationwide MFUPC also took place from weeks 17-20.
Republic of South Sudan
Measles Outbreak and Response Weekly Situation Update

Figure 3: A map showing measles outbreak distribution by counties from 2023 week 28

Table 2: Distribution of reported measles cases and deaths by age groups in South Sudan, 2022-2023

<table>
<thead>
<tr>
<th>Age Groups</th>
<th>No. of cases 2022</th>
<th>% 2022</th>
<th>Deaths % 2022</th>
<th>No. of cases 2023</th>
<th>% 2023</th>
<th>Deaths % 2023</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-11 mths</td>
<td>1,137</td>
<td>27.5</td>
<td>10</td>
<td>911</td>
<td>17.4</td>
<td>17</td>
</tr>
<tr>
<td>1-4 yrs</td>
<td>1,931</td>
<td>46.7</td>
<td>27</td>
<td>2,568</td>
<td>49.0</td>
<td>75</td>
</tr>
<tr>
<td>5-9 yrs</td>
<td>612</td>
<td>14.8</td>
<td>4</td>
<td>966</td>
<td>18.4</td>
<td>15</td>
</tr>
<tr>
<td>10-14 yrs</td>
<td>277</td>
<td>6.7</td>
<td>2</td>
<td>356</td>
<td>6.8</td>
<td>7</td>
</tr>
<tr>
<td>15+ yrs</td>
<td>180</td>
<td>4.4</td>
<td>2</td>
<td>443</td>
<td>8.4</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td>4,137</td>
<td>100.0</td>
<td>45</td>
<td>5,244</td>
<td>100.0</td>
<td>123</td>
</tr>
</tbody>
</table>

Note: Majority 6,547(70%) of all the measles cases are children below 5 years of age considering both years. The case fatality rate is highest (1.4% and 3.0%) among children age 1-4 years in 2022 and 2023. Most (129) out of the 168 reported deaths were among children below age 5 years.

Figure 3: Percentage distribution of measles cases and their vaccination status: 2023

Note: Generally, 4,175(80%) were unvaccinated (zero, unknown) including 2,723(65%) children <5 years. Among children less than one year old (911 cases), 81% (735 cases) have not been vaccinated against measles compared with 176(19%) vaccinated. This trend is observed across all the age groups.
### Coordination

- The country is developing a one-country plan for the Sudan crisis of which the Measles situation is led by the health cluster.
- The incident management structure remains in place and lead by the MOH.
- The vaccination response and the measles outbreak post-Sudan crisis plan developed and shared with partners.
- The country developed a Measles Mop up and reactive campaign and other immunization activities cost at $2,039,350.

### Surveillance and Laboratory

- Enhanced surveillance ongoing in silent counties.
- Sample collection for all counties that last had measles outbreak confirmed in the last 4 weeks see list below (Annex 1) to monitor the Measles epidemiology.
- Enhance surveillance for VPDs, especially at the points of entry for the refugees, returnees from Sudan and in the silent counties.
- Ensure weekly reporting (including zero dose reporting where applicable).

### Case Management

- The MOH, WHO, and partners are intensifying measles case management (including vitamin A administration), surveillance, and risk communication in locations with suspected and confirmed outbreaks.
- In collaboration with partners and MOH, WHO is prepositioning kits to support case management in counties with active outbreaks.

### Vaccinations

- A total of 15 counties are targeted for the reactive campaign, and 14 counties targeted for POE/Transit post-vaccination.
- National EPI TWG endorsed the plan (7 counties (Abyei, Juba, Ayod, Fangak, Longechuk and Melut, secure funding from WHO and MEDAIR).
- Approaching partners to support/implement the campaign in the remaining counties, information shared at the HCC and other forums.
- Preparation for the implementation in 7 counties is ongoing, with Ayod to start implementation by 11 August 2023.

### Demand Generation/ Communication

- Demand generation activities ongoing for the planned mop-up and reactive campaigns as well as routine immunization (radio talk shows and jingle broadcast).

### Operational challenges and gaps

- Inadequate detailed investigation of suspected measles cases and deaths in counties reporting.
- Inadequate sample collection for laboratory confirmation and classification cases of suspected measles cases.
- A high proportion of unvaccinated/unknown status children (80%) was detected among the cases, noting the poor quality of investigations and gaps in immunization, especially among the returnees and refugees.
- Late and constant retrospective reporting of suspected cases.
- Incomplete and inaccurate filling of line lists.
Way Forward

- MOH and partners to support planned mop-up campaign and other measles activities
- State and County MOH to continue weekly reporting of measles cases (including zero reporting where applicable)
- Prompt detection and management of measles cases
- Samples to be collected from suspected cases in counties that continue to report and the lab confirmation is beyond four weeks to monitor the epidemiology
- Strengthen routine immunization at POEs and within the community
- Prioritize case management to reduce morbidity and mortality.
- Enhance the risk communication and community engagement on health and help-seeking behavior.

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