

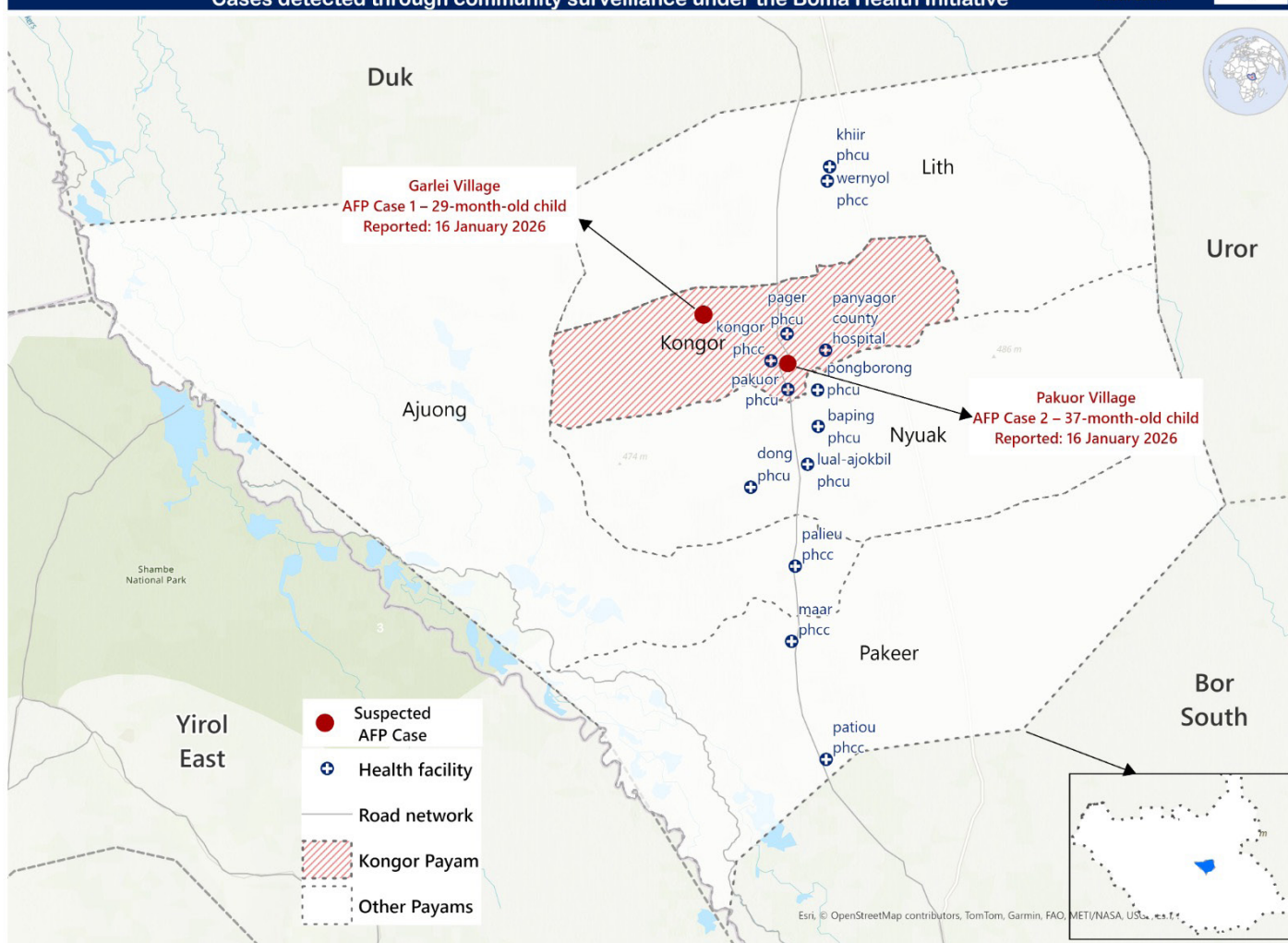


VOICES

from the field

Community Detectives: How the Boma Health Initiative fuels South Sudan's Polio Surveillance Network

Detection of Suspected Acute Flaccid Paralysis (AFP) Cases Twic East County, Jonglei State – January 2026 Cases detected through community surveillance under the Boma Health Initiative



The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

Data Source: WHO South Sudan
Map Production: Event Intelligence Unit, WHO South Sudan



Production Date: 16/03/2026
0 5 10 20 20 Kilometers

By Authors: Dr. Jok Mayom Jil, Dr. Eric Rurangwa, Mayom Angok Mayom, Dr. William Ruai Kuol, Beatrice Muraguri and Oluwaseun Abiola Egbinola

In the flood-affected islands of Twic East County in Jonglei State, where health facilities are few and roads often disappear under water, disease surveillance can be as challenging as

reaching the communities themselves. Yet it was here that community volunteers helped detect two suspected cases of acute flaccid paralysis (AFP), a key indicator used worldwide to identify possible polio infections.

“Our mission is to look out for any unusual illness, particularly in children,” said Juach Ajak Deng, a BHI

supervisor in Kongor Payam. **“When we see a child limping and weak, we contacted health officials right away. We were trained to recognize the warning signs.”**

AFP surveillance remains one of the most important tools in the global fight against polio. In South Sudan, detecting cases early is often complicated by

insecurity, flooding, vast distances and limited health infrastructure. In Twic East County, where only seven health facilities serve a population of more than 150,000 people, these challenges are a daily reality. But the growing network of community health actors is helping bridge this gap.

WHO’s Rapid Response in a remote Setting

This system proved critical in January 2026, when two young children in remote villages of Garlei and Pakuor in Kongor Payam developed sudden weakness that progressed to paralysis.

The first case involved a 29-month-old child whose lower limbs rapidly weakened and progressed to paralysis within 48 hours. The second case involved a 37-month-old child who developed weakness in the right arm and leg. Both cases were reported on 16 January 2026, just days after symptoms began.

Following the alert, the county surveillance team quickly mobilized a rapid response investigation. **“I received a call from a community health worker and immediately informed the county surveillance officer,”** explained Mayom Angok, WHO Field Supervisor supporting the polio programme in Twic East. **“We convened the rapid response team and investigated both cases. These timely reports show how important community engagement is.”**

Two stool samples were collected from each child within the 14-day surveillance window, following WHO AFP surveillance protocols. The samples were preserved under cold chain and transited to the National Public Health Laboratory in Juba, then a WHO-accredited regional laboratory for analysis.

As of Mid-March, both AFP cases continue to demonstrate residual paralysis despite laboratory results returning negative. Further clinical evaluation and monitoring are recommended to determine the underlying cause and to guide appropriate management.

Despite the timely detection and response, the investigation also highlighted the persistent challenges of conducting disease surveillance in remote areas. Flooded terrain delayed rapid response teams from reaching



the affected villages, while maintaining the cold chain for stool samples required the use of portable vaccine carriers. Communication also proved difficult, as unreliable mobile network coverage meant that some alerts had to be relayed through community messengers. In addition, initial fear and stigma surrounding paralysis required sustained dialogue and reassurance from community health workers.

Trusted Eyes and Ears of a Community

Launched by the Ministry of Health in 2017, the Boma Health Initiative (BHI)

strengthens community-based health services and disease prevention across South Sudan. Through trained Boma Health Workers (BHWs), Community Health Workers (CHWs) and community volunteers, the initiative ensures that unusual illnesses are detected and reported quickly.

Beyond detection, BHI volunteers also help communities understand the symptoms and importance of early reporting.

“When my child’s leg became weak, I didn’t know it was a serious problem,” said Adhol Deng, caregiver of one of the children. **“The BHI volunteer visited us**

and advised us to take the child to the hospital immediately. Without them, we may not have acted quickly.”

For many families, community education helps to overcome fear and misconceptions.

“At first we thought it was a curse,”

said Achol Gach, another caregiver. *“But the health worker explained that it is a disease that must be reported early. Now we understand why it is important.”*

Community leaders say awareness has improved significantly.

“Before BHI, many people did not know about paralytic diseases,” said Khot Ajang, a local chief. *“Now volunteers teach families how to recognize symptoms and report them early. This is protecting our children.”*



Caption: WHO Field Supervisor travelling to investigate an AFP case in Twic East County.

A model for strengthening surveillance

For Health officials, case detection demonstrates value in integrating community health networks into surveillance systems.

“Community partnership through the BHI network was exemplary,” said Dr. Chol Leek, County Health Director of Twic East. *“Families reported symptoms quickly, allowing investigations and follow-up. This model can strengthen surveillance across remote areas.”*

WHO’s Expanded Programme on Immunization (EPI) team is now reinforcing this approach by integrating

BHI networks more closely with disease surveillance systems.

“To sustain these gains, we will continue strengthening coordination, improving communication channels and expanding community awareness,” said Dr. Jok Mayom Jil, WHO EPI Officer. *“Timely detection like this shows how community-based systems can increase surveillance sensitivity.”*

Protecting Every Child

The detection of the two AFP cases underscores how community engagement can overcome geographic and infrastructural barriers in fragile settings.

Through trained and trusted local volunteers and stronger partnerships between communities and health authorities, the Boma Health Initiative is helping ensure that even in the most remote corners of the country, no warning sign of polio goes unnoticed, and no child is left unprotected.

As South Sudan continues its journey toward polio eradication, the experience in Twic East County highlights a powerful lesson: when communities are empowered, no child is beyond the reach of protection.