

## **17<sup>th</sup> UOEEAC Meeting Final Report**

### **Overview**

The 17<sup>th</sup> meeting of the Uganda Onchocerciasis Elimination Expert Advisory Committee (UOEEAC) met in Kampala from August 7-8, 2024. The UOEEAC consists of institutional members from the Uganda Ministry of Health (MOH)/District Health Department, the Carter Center and at-large members who are experts in the field of onchocerciasis elimination and control. In addition to the voting members, the meeting was attended by representatives from World Health Organization and partners involved in Uganda's onchocerciasis elimination effort, including district health and political representatives and organizations operating in two major refugee camps in Uganda. Representatives from the Republic of South Sudan (RSS) and the Democratic Republic of Congo (DRC) also attended, informing the participants about onchocerciasis programmatic activities in border areas containing potentially shared transmission zones.

As in previous years, the major task of the 17<sup>th</sup> meeting of the UOEEAC was to evaluate the current status of onchocerciasis in Uganda in light of the guidelines for elimination set forth by the MOH and the World Health Organization (WHO), and to provide both general and focus-specific recommendations to the MOH regarding the status of transmission at these foci. As the UOEEAC is solely an advisory body, the recommendations of the committee are to be considered as expert opinion only. Final authority for accepting or rejecting these opinions rests with the MOH and the Uganda Onchocerciasis Elimination program.

### **General Recommendations:**

1. The committee noted that a backlog of unprocessed flies exists in the laboratory. The committee recommended that the laboratory staff work to complete the analysis of these flies to ensure that a minimum of 6000 flies is examined from each focus, or if less than 6000 flies were collected from a district, to analyze all flies available from the district.
2. The committee recommended that the program work to ensure that daily fly catch numbers are recorded and reported to the program, as these data are necessary to calculate annual transmission potentials in foci where vector numbers are low (or flies are absent altogether).
3. The committee recommended that the program carry out follow up post elimination surveys in foci where more than five years have passed since

elimination was declared. Priority should be given to the Mount Elgon Focus, given some reports of suspected transmission on the Kenyan side of the border, as well as to those foci where there is an increased risk of reintroduction or recrudescence.

4. The committee recommended that the program work to develop a strategic plan for rapidly detecting potential reintroduction of the parasite from sources outside Uganda, concentrating on refugees from currently endemic areas in particular.

5. The committee recommended that the program collaborate with the lymphatic filariasis program to consider the feasibility of integrating post-elimination surveillance activities in foci where TAS3 LF surveys are planned.

#### **Madi Mid North Southern sub-focus:**

1. The results reported at the meeting suggested that attempts to rely upon community volunteers to conduct slash and clear community based vector control met with varying degrees of success, based upon the reduction in biting rates observed. The committee recommended that the program disaggregate the slash data by community to determine in which communities efforts to engage volunteers was successful and in which it was not. The committee recommended that the program engage social scientists to determine possible reasons for success and failure in the different communities.

2. The committee recommended that the program work with social scientists to develop community outreach programs to motivate them to carry out slash and clear on their own, based upon the findings of the above mentioned study.

3. The committee recommended that the program work to ensure that district health personnel as well as civic and political leaders are aware and supportive of slash and clear activities in their districts and their importance to the efforts to eliminate onchocerciasis from Uganda.

4. The committee recommended that the program investigate the feasibility of carrying out alternative methods of vector control in areas where slash and clear is not possible or where it was not successful when properly implemented.

#### **Madi-Mid North Northern Sub Focus and Cross-Border Activities:**

1. The committee was gratified to see that the collaboration with the Republic of South Sudan has continued to prosper over the past year. The committee recommends that the program seek to collaborate with RSS in mapping the extent of the cross-border foci, providing as much technical support to RSS as possible.
2. The committee was pleased to welcome representatives of RSS to this year's meeting and hopes that a representative from the Ugandan program will be invited to attend the next meeting of the RSS committee.
3. The committee recommended that Uganda work with the program in RSS to identify a team of local officials from RSS and Uganda to work together to coordinate treatments and other activities in the cross-border foci.
4. The committee recommended that Uganda work to support training of RSS staff for entomological and serological surveillance as we work together towards regional elimination.
5. The committee recommended that the Ugandan program advocate in support of implementing twice per year treatments in RSS in the border foci.
6. The committee recommended that the Ugandan program continue to support RSS in entomological and serological surveillance in the cross-border foci when security and political conditions permit.

#### **Lhubiriha focus:**

1. The committee was gratified to see the wealth of evidence on the status of transmission in the Lhubiriha focus presented at the meeting. As recommended by the committee in 2023, the program carried out a serological evaluation of dried blood spots (DBS) collected from over 3100 children in the focus. All were negative. Similarly, the Uganda program analyzed over 1800 DBS collected in the Democratic Republic of Congo cross-border area of Beni Butembo, all of which were also negative. The program also conducted entomological surveillance in the focus during the previous year. In keeping with the findings of the most recent years, fly numbers have dropped precipitously since the floods of 2020, with only 44 flies collected during 2024. Finally, the Ugandan program was able to conduct a visit to Beni Butembo. They found that the flood of 2020 had also affected the rivers in DRC, destroying potential breeding sites. In addition, the Ugandan team noted that there have been dramatic anthropogenic change in the area, with extensive deforestation, the development of refugee communities along the border with extensive urbanization and a concomitant increase in pollution. This area thus appears to have become unsuitable for vector breeding. Based upon these findings, the committee recommended that the program re-classify the

Lhubiriha focus as "transmission interrupted", stop MDA after the already-planned October 2024 campaign, and begin the 3 to 5 year WHO-recommended post-treatment surveillance period.

2. The committee recommended that the program continue entomological surveillance activities in the focus to ensure that the vector populations do not rebound.

3. The committee recommended that the program also work with colleagues in DRC to conduct enhanced serological and entomological surveillance activities to determine risk of re-introduction to the Lhubiriha focus.

4. The committee recommended that the program prepare a manuscript describing the situation in the Lhubiriha focus for publication in a peer reviewed journal, which can become part of the eventual verification dossier to be submitted to WHO.

#### **Refugee camps:**

1. The committee was pleased to note that ivermectin MDA has been instituted in Palorinya and Palabek, two of the major camps housing refugees from onchocerciasis endemic areas of adjoining countries. The committee recommends that the program work to ensure that enough ivermectin is obtained to treat all refugees from endemic areas.

2. The committee recommends that the program assist the staff of the Palorinya and Palabek refugee camps in carrying out coverage surveys in these camps.

3. The committee recommends that the staff of the Palorinya and Palabek camps conduct a thorough review of the treatment registers prior to carrying out subsequent rounds of MDA in order to obtain an accurate denominator for coverage calculations.

4. The committee was concerned about the discovery of active vector breeding sites in the Aswa river near the Palabek camp. The committee recommends that the program conduct feasibility studies of deploying vector control at these breeding sites to minimize the chances of transmission derived from patently infected individuals housed in the camp.

5. The committee recommends that the program consider evaluating the other refugee camps in Uganda with regard to the need for ivermectin MDA.

Table 1: Status of Uganda foci of onchocerciasis with respect to PES activities:

Focus	Current status	PTS completed	PES Can begin	PES conducted
Victoria Nile	Eliminated	1974		2017
Mpamba-Nkusi	Eliminated	2016	2021	
Itwara	Eliminated	2016	2021	
Mt. Elgon	Eliminated	2016	2021	
Imaramagambo	Eliminated	2016	2021	
Wambabya-				
Rwamarongo	Eliminated	2017	2022	
Kashoya-Kitomi	Eliminated	2017	2022	
Obongi / Moyo	Eliminated	2019	2024	
Wadeli	Eliminated	2021	2026	
Nyamugasani	Eliminated	2021	2026	
West Nile	Eliminated	2021	2026	
Budongo	Eliminated	2022	2027	
Bwindi	Eliminated	2022	2027	
Maracha-Terego	Eliminated	2023	2028	
Nyagak Bondo	Eliminated	2023	2028	
Madi mid North	Transmission			
(lower)	Interrupted	NA	NA	
Madi mid North	Interruption			
(upper)	Suspected	NA	NA	
	Interruption			
Lhubiriha	Suspected	NA	NA	

Recommended field and laboratory surveillance activities 2024-25:

Focus	Field Activity	Laboratory Activity	Priority
Lhubiriha	Entomology	Fly PCR	1
Mt. Elgon	Entomology PES followup	Fly PCR	1
Mt. Elgon	Serology PES followup	Ov16 ELISA	1
PES followup (one additional eligible focus)	Entomology PES followup	Fly PCR	3
PES followup (one additional eligible focus)	Serology PES followup	Ov16 ELISA	3
MMN North	Complete analysis of 6000 flies from RSS	Fly PCR	2
MMN North	Continue to provide technical support to RSS program	Ov16 ELISA Fly PCR	2
Refugee camps	Evaluate onchocerciasis situation in camps in addition to Palorinya and Palabek	Ov16 ELISA	2

## Status of Onchocerciasis in Uganda August 2024:

