

## 15<sup>th</sup> UOEEAC Meeting Final Report

### Overview

The 15<sup>th</sup> meeting of the Uganda Onchocerciasis Elimination Expert Advisory Committee (UOEEAC), an advisory body commissioned by the Uganda Ministry of Health (MOH), met in Kampala from August 3-5, 2022. The meeting was held in person, marking a welcome end to the restrictions engendered by the COVID19 epidemic in 2020 and 2021, which necessitated holding the meeting in a virtual format. The UOEEAC committee consists of institutional members from the Uganda MOH/District Health Services (DHS) and the Carter Center, as well as at-large members who are experts in the field of onchocerciasis elimination and control.

As in previous years, the major task of the 15<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. The following sections summarize the general and focus-specific recommendations and provide recommendations for activities to be conducted by field teams and the laboratory in the coming year. As the UOEEAC is solely an advisory body, the recommendations of the committee are to be considered as expert opinion. Final authority for accepting or rejecting these opinions rests with the MOH and the Uganda Onchocerciasis Elimination program.

### Focus-Specific Recommendations:

Budongo focus: The program presented comprehensive data collected during the third year of post treatment surveillance (PTS) that convincingly demonstrate that transmission had not become re-established following the end of mass drug administration (MDA): all specimens from 3104 children less than 10 years old were negative for Ov16 antibodies. Furthermore, fly collections continue to demonstrate the absence of *S. neavei* vectors in the focus since 2014. The committee congratulated the Budongo team on a job well done and recommended that the focus be re-classified as "transmission eliminated" (dark green).

Bwindi focus: The program also presented convincing evidence from three-year PTS in Bwindi. All specimens from 3090 children less than 10 years old were negative for Ov16 antibodies. The committee noted that the number of vector flies collected (*S. damnosum s.l.*) were quite small, although the collection times were substantial. As all the flies collected were negative in the O-150 PCR

assay, the calculated annual transmission potential (ATP) was 0, with a 95% confidence interval of 0-3.5. As this meets the WHO criterion of a 95% confidence interval for the ATP of below 20, the UOEEAC recommended re-classifying this focus as "transmission eliminated" (dark green).

Maracha-Terego focus: Interruption of onchocerciasis was declared in Maracha-Terego focus in 2012, but PTS did not start until 2019 due to continued MDA with ivermectin (and albendazole) for lymphatic filariasis in the focus. The entomological data presented to the UOEEAC indicate that *S. damnosum* and *S. neavei* flies have not been detected since 2010 and that transmission had not become re-established during the three-year PTS period. However, the finding that seven (7) of 3373 children less than 10 years old had antibodies to Ov16, suggesting exposure to *O. volvulus*, meant the committee could not rule out re-establishment of transmission. The program noted that the focus receives an influx of refugees from the Democratic Republic of the Congo (DRC). The committee recommended provisionally re-classifying this focus as "transmission eliminated" (dark green), but wait to formally re-classify the focus pending a report of the residence history and results of skin snip PCRs from the seven Ov16-positive children.

Lhubiriha focus: *S. killibanum* is believed to be the vector in Lhubiriha. *S. killibanum* is an inefficient vector, and the annual biting rate, based on recent entomological collections have suggested the biting rate is very low (in the range of 100-300 bites per year). None of the very limited number of flies collected in this focus have been found to be carrying *O. volvulus* L3. The program also presented final results of serological surveys conducted in 2019: three (3) of 3012 children less than 10 years old were positive for Ov16 antibodies. Based upon these results, and the lack of evidence for ongoing transmission at this focus for the past few years, the committee recommended that Lhubiriha be re-classified as "interruption suspected" (grey-green) from "transmission ongoing" (red). However, as Lhubiriha is on the border with DRC and there is a lot of population movement from DRC to Uganda and *vice versa*, the committee recommended that the program try to re-establish the collaborative cross border studies with DRC which were interrupted by the COVID pandemic. The committee also recommended that the program re-visit the river systems where breeding has historically been found and determine ecological or anthropogenic changes have occurred that have eliminated the habitats the vectors need to breed efficiently.

Nyagak Bondo focus: The committee noted that it is looking forward to hearing the results of both entomological and serological PTS activities at its next meeting, in preparation for re-classification as transmission eliminated (pending successful PTS). The committee recommended that the program increase fly collections throughout the focus during the PTS evaluation, including swampy area on the border with DRC. The committee also recommended that the program try to get access to the fly collection data that DRC has collected in cross border area, if at all possible. The committee recommended that the program work through several potential paths, including the MOH, WHO, local officials (LC 5 Chairmen and Resident District Commissioners [RDCs]) and the Lions Club to strengthen cross border communication and collaboration in this area.

Madi mid North focus: The committee recommended that the program consider expanding slash and clear vector control to all areas possible. The committee recommended that the program conduct a comprehensive stop-MDA survey (entomological and serological) in the seven southern districts of this focus that are at lower risk from cross border reintroduction, in order to allow the consideration that these districts might be re-classified as transmission interrupted. In the coming year, the committee recommended that the program continue regular operations in all districts of the focus, including twice-per-year MDA, and advocated for strengthened cross-border coordination with Republic of South Sudan (RSS).

#### **General recommendations:**

1. The Ugandan MOH should request that the WHO Representative in Uganda reach out to his counterparts in DRC and RSS to assist with strengthening the cross-border collaborations for specific foci to ensure elimination of transmission of Onchocerciasis in Uganda. The Ugandan MOH should also request support and assistance of the WHO AFRO Regional Director to ensure that WHO Representatives in Uganda, DRC and RSS work in close collaboration to ensure on-the-ground activities are implemented for strengthening the cross-border collaboration for specific foci to ensure elimination of transmission of Onchocerciasis in Uganda and eventually in the cross border foci of DRC and RSS.
2. The program should work to reinforce their relationships with DRC local officials in the areas bordering Uganda, as these relationships have proven to be

key factors in the successful collaborative work done by both programs in the cross-border foci.

3. If possible, and resources permit, the program should assist the RSS program in mapping the borders of the Kajo-Keji focus.

4. The program should continue to support capacity building, Slash and Clear instruction and coverage surveys in Kajo-Keji and Magwi counties, RSS and continue to provide laboratory support for the analysis for samples from RSS collected in the cross border areas.

5. The program should work with RSS program officials and the RSS committee to lobby partners to support twice-per-year treatments in Kajo-Keji and Magwi counties

6. The committee noted with pleasure the progress made in bi-national meetings over the past year. In this regard, the committee recommended that the program request that the DRC and RSS invite program representatives from Uganda to their elimination committee meetings, as the UOEEAC has done in the past few years. Such bilateral communication among the committees will be important in enhancing the efforts to eliminate transmission in the cross-border foci. If possible, these should include local, as well as central, officials, as local officials have close connections across the border and can effectively assist in implementing cross border activities.

7. Given the frequent population movements across the borders of Uganda with RSS and DRC, the committee felt that it would be valuable if the program worked to harmonize ivermectin distribution times in cross-border areas.

8. The committee noted that in the context of the onchocerciasis elimination program, the use of Abate supplied by The Carter Center must be justified by relevance to onchocerciasis disease and transmission elimination, as use outside of this is not within the conditions of the Abate donation. For the control of nuisance biting flies, the program should lobby the Ugandan government to provide Abate from an independent source.

9. The committee recognized the progress made by the program working with the office of the prime minister (OPM), UNHCR and partners to implement MDA for refugees who came from onchocerciasis endemic counties of South Sudan settled in Madi Mid North (Lamwo and Moyo-Obongi). The Committee

encourages UNHCR and partners to include NTD control/elimination interventions to cover all populations from endemic countries.

10. The committee recommended that the MOH should host a celebration of success for team members and stakeholders in all foci where onchocerciasis has been eliminated.

11. The committee recommended that the program convene a working group to discuss strategic and tactical approaches to post-elimination surveillance.

## Workplan for coming year

Focus	Field work	DBS	skin snips	Flies
Lhubiriha	Ecological assessments	0	0	0
Nyagak Bondo	PTS	3000	0	6000 (max)
Madi-mid North	Stop MDA (7 districts)	3000	0	6000 (max)
Maracha Terego	PTS	0	7	0
RSS	mapping	3000 (max)	0	6000 (max)
DRC	mapping	3000 (max)	0	6000 (max)
Total		9000	7	24,000

# Updated Oncho Map 2022:

