

Soil-Transmitted Helminthiasis Advisory Committee

Summary Meeting Report and Recommendations

24-25 October 2015
Philadelphia, Pennsylvania, USA

Executive Summary

The Soil-Transmitted Helminthiasis (STH) Advisory Committee and partners engaged in the epidemiology, control and elimination of STH convened at the Hyatt at Bellevue Hotel in Philadelphia on Saturday 24 and Sunday 25 October, 2015. The meeting included: 1) updates on the progress and challenges in global STH control; 2) monitoring and evaluation; and 3) operational research; and 4) discussion on the emerging role of the Advisory Committee.

This report contains: 1) the meeting objectives and recommendations; 2) the meeting agenda (Annex A); and 3) a list of participants (Annex B). Background documents and presentations from the meeting are available in a [Drop Box](#) file. High-priority recommendations are indicated in **bold** font.

Updates: Progress and Challenges in Global STH Control

Objective

Review challenges and progress toward current milestones on the WHO roadmap for STH control.

Agenda Items

- 3 & 4. Progress and challenges in global STH control
 - a. Progress and challenges in STH control - Montresor
 - b. WHO WASH-NTD Global Strategy - Fleming
 - c. STH Coalition - Anyanwu
 - d. Unreported STH treatments - Gass
 - e. Availability of quality drug for treatment of preschool-age children - Baghaki and Ajello

Recommendations

1. *WASH*. The STH Advisory Committee
 - Welcomes with appreciation the publication of the landmark World Health Organization (WHO) document, *Water, sanitation & hygiene for accelerating and sustaining progress on neglected tropical diseases: A global strategy 2015-2020*;
 - Appreciates the work of the NTD NGDO Network (NNN) WASH working group in advancing the collaboration between the NTD and WASH sectors;
 - Encourages members of the STH Coalition WASH workstream and other partners to collaborate with WHO and the NNN WASH working group to advance the engagement of WASH in STH control;

- Calls on donors supporting WASH programs to encourage STH-specific WASH behaviors in those programs; and
- Recommends operational research on:
 - The impact of specific WASH behaviors and practices on STH
 - A modeling exercise to examine various WASH implementation trajectories and their cost and impact on STH transmission dynamics.

2. *Unreported deworming.* The STH Advisory Committee notes the challenges represented by unreported and unprogrammed deworming, both for accurate assessment of drug coverage and for access to quality drugs. Centralized reporting of deworming is particularly difficult in countries with decentralized public health systems. Recognizing the importance of the 2020 WHO deworming coverage targets and the need for those figures to be as inclusive and accurate as possible, the STH Advisory Committee:

- **Calls for multi-country operational research** using mixed methods to
 - better understand the magnitude, patterns, motivations for, and impact of unprogrammed deworming; and
 - assess the quality of deworming drugs used in unprogrammed deworming;
- Urges the development and validation of tools to assess unprogrammed deworming in drug coverage surveys;
- Encourages the more widespread use of drug coverage surveys to validate routine program coverage data, as is commonly done for other NTDs;
- **Encourages NGOs and individuals conducting deworming to inform and coordinate treatment and reporting with appropriate government agencies and officials** (which may be at the local or district level); and
- Urges WHO to continue and intensify its efforts to assess unreported deworming through collaboration with UNICEF and through its support of the NGO deworming inventory.

3. *Drug quality.* The STH Advisory Committee notes with alarm the substandard quality of generic albendazole and mebendazole being used in many STH-endemic countries and the current lack of WHO-prequalified generic albendazole or mebendazole manufacturers. The Committee:

- **Urges WHO to encourage the prequalification of manufacturers of generic deworming drugs; and**
- **Urges collaboration among WHO, UNICEF, large-scale NGO procurers of deworming drugs, the STH Coalition, national governments, and drug manufacturers to identify and implement solutions to address the lack of high-quality generic deworming drugs.**

4. *Women of reproductive age.* The STH Advisory Committee supports WHO current recommendations for deworming women of reproductive age and notes with concern the low priority of deworming in this risk group and the subsequent low coverage. The Committee:

- Urges WHO to finalize and publish joint guidelines with UNICEF for deworming at-risk women of reproductive age;
- **Encourages CWW to convene a new STH Coalition workstream on women of reproductive age to identify and overcome barriers to deworming in this risk group;** and
- Urges WHO to improve reporting of deworming in women of reproductive age and to report on drug coverage for STH in this risk group in its annual *Weekly Epidemiological Record (WER)* on STH.

Monitoring and Evaluation

Objective

Advance monitoring and evaluation of STH control programs.

Agenda Items

5 & 6. Monitoring and evaluation

- a. Global STH indicators and milestones for monitoring progress and for the London Declaration 'scorecard' – Belizario, Addiss
- b. Transition from LF to STH: Implications for programs and operational research – King, Wainwright, Bradley, Montresor

Recommendations

5. *Indicators for London Declaration scorecard.* **The STH Committee reviewed recommendations of its M&E sub-committee regarding use of WHO indicators and milestones for assessing progress toward STH control for the purposes of the annual London Declaration scorecard. For each of nine indicators articulated in the 2012 WHO STH Strategic Plan, the Committee made the following recommendations:**

Indicator 1: Percentage of STH-endemic countries in which STH mapping to identify areas requiring PCT has been completed.

5.1. The STH Advisory Committee

- Appreciates the ongoing effort by the WHO African Regional Office (AFRO) to develop detailed district-level maps of STH prevalence and intensity and looks forward to the results of this mapping initiative;
- Encourages continued STH mapping by Ministries of Health and partners to refine the geographic distribution of STH infection and better understand the magnitude of the 'at-risk' population;
- Urges all partners involved in mapping to share data with the Global Atlas of Helminth Infections (GAHI), the Global NTD Database (GNTD), and other appropriate geospatial databases; and
- Recommends *not* including this indicator in the 2016 London Declaration scorecard.

Indicator 2: Percentage of preschool-age children (PSAC) needing treatment worldwide who have been treated

Indicator 3. Percentage of countries requiring PC for STH that have reached 75% national coverage of PSAC

Indicator 4. Percentage of school-age children (SAC) needing treatment worldwide who have been treated

Indicator 5. Percentage of countries requiring PC for STH that have reached 75% national coverage of SAC

5.2. The STH Advisory Committee:

- Appreciates the importance of deworming coverage as a process indicator for the global STH control program;
- Adopts these four indicators for reporting to the annual LD scorecard and encourages WHO to continue to report on them annually in the *WER*;
- Urges WHO to continue to improve reporting and accuracy of estimates of drug coverage by:
 - Collaborating with UNICEF and incorporating data from UNICEF-supported deworming of PSAC into the WHO PCT Databank;
 - Incorporating data collected by CWW in the NGO Deworming Inventory into the WHO PCT Databank; and
 - Working with partners to investigate ways to include unprogrammed and otherwise unreported deworming into official deworming coverage estimates;
- Encourages the use of coverage surveys for STH preventive chemotherapy; and
- Urges WHO and endemic country governments to improve estimates of at-risk populations (i.e., the denominator for coverage figures) by more refined mapping and parasitologic monitoring.

Indicator 6. Percentage of children in countries requiring PC who have infection of moderate or heavy intensity.

5.3 The STH Advisory Committee:

- **Affirms its support for the WHO goal of eliminating STH as a public health problem, defined as <1% prevalence of moderate-to-heavy intensity STH infection;**
- **Regards this as the most important indicator for assessing progress toward the WHO goal of eliminating STH as a public health problem by 2020;**
- Urges STH control programs to measure and report intensity as well as prevalence of STH infection;
- Recommends that WHO encourage annual reporting on this indicator by Ministries of Health, using the WHO PC data collection forms, and that WHO report progress on this indicator in annual STH summary in the *WER*;
- Recommends that progress on this indicator be reported to the London Declaration scorecard, with the specific milestone for 2016 to be determined;

- Recommends that WHO, with partners and technical STH experts, develop guidelines for STH program managers for parasitologic monitoring and evaluation of STH in all risk groups; and
- Calls for operational research to inform the development of these guidelines (e.g., clarification of the ratio of overall STH prevalence to prevalence of moderate-heavy intensity infection);

Indicator 7. Percentage of countries requiring PC for STH that regularly assess the intensity of the infections in sentinel sites.

5.4 The STH Advisory Committee:

- Notes that this indicator is essentially a process indicator in support of Indicator 6;
- Requests that WHO assess progress on this indicator through data provided by STH Program managers to the WHO PC Epidemiologic Data collection form, and that WHO include this figure in the annual *WER* on STH control; and
- Recommends that progress on this indicator be reported annually to the London Declaration scorecard, with the specific milestone for 2020 being 100%.

Indicator 8. Percentage of countries requiring PCT for STH whose national policies for STH control involve intersectoral collaboration (for example, with education and WASH)

5.5 The STH Advisory Committee:

- Appreciates the importance of intersectoral collaboration for STH control;
- Notes that the current indicator lacks a case definition, a reporting mechanism, and a data repository, making it problematic as an indicator either for WHO or the London Declaration scorecard;
- Encourages enhanced cross-sectoral collaboration for STH control at the global, national, and local levels;
- Encourages CWW and the Partnership for Child Development (PCD) to maintain databases on NTD Master Plans and Education Sector Plans, respectively, and to monitor the degree to which these plans adequately address cross-sector collaboration and other factors in support of STH control;
- Urges the M&E sub-committee to consider possible metrics for cross-sectoral collaboration that can improve the utility of this indicator; and
- Recommends not including this indicator in the 2016 London Declaration scorecard.

Indicator 9. Percentage of countries requiring PCT for STH that have developed national plans of action

5.6 The STH Advisory Committee:

- Recognizes the importance of plans of action for mobilizing resources and implementing coordinated, effective STH control programs;
- Encourages WHO to maintain updated records on national NTD Master plans and national plans of action for STH control;
- Requests WHO to report the proportion of countries with such plans for the purpose of the London Declaration scorecard; and

- Recommends including this indicator in the 2016 London Declaration scorecard.

6. *LF-to-STH transition.* The STH Advisory Committee appreciates the enormous contribution of the LF elimination program to STH control and celebrates progress toward LF elimination. The Committee also notes with concern the potential treatment gap for STH, as LF programs scale down, and:

- Urges WHO to determine and share information on the magnitude and geographic distribution of the potential geographic and demographic treatment gap globally so that its partners can provide programmatic and technical assistance to countries facing this transition and ensure that STH control programs are in place when mass drug administration for LF is stopped;
- **Urges evaluation and operational research on the LF-to-STH transition to identify and promote the policy frameworks, capacity-building, planning, and intersectoral collaboration needed for effective transitions; and**
- **Recommends that WHO convene a working group to identify possible interim strategies for STH control in these settings.**

7. *Strategy.* **The STH Advisory Committee appreciates the excellent guidance provided by the 2012 WHO STH strategic plan. The Committee also welcomes the accumulating programmatic experience and scientific evidence on STH control since 2012, the contribution of the LF elimination program to STH control, increased financial and organizational resources, and re-invigorated conversations on the most effective drug delivery platforms for reaching all at-risk groups. In light of these developments, the Committee urges WHO to review and revise the current global STH control strategy.**

Operational Research

Objective

Review and prioritize STH operational research.

Agenda Items

- Operational research: Brief updates and late-breaking highlights
 - STH research in SCORE - Colley
 - STH research – Filling the Gaps - Rebollo
 - STH research in DOLF - Fischer
 - NTD Modelling Consortium – Hollingsworth, Turner, Truscott
 - STH and WASH, Bangladesh – Benjamin-Chung
 - STH and WASH - Freeman
 - Cost-effectiveness of drug administration for schistosomiasis and STH - Lo
 - STH in women of reproductive age - Gyorkos
 - STH risk mapping – Utzinger
- Bill & Melinda Gates Foundation – STH operational research strategy
 - Overview – Brooker
 - Field studies on feasibility of elimination of STH – Walson & Littlewood
 - Interrupting transmission in Kenya – Pullan & Mwandawiro
- New developments in STH diagnostics – Williams

10. Implications of the recent Cochrane Review for STH research
 - a. Synopsis of session on this topic at COR-NTD meeting – Addiss
 - b. Perspective – Mwandawiro
 - c. Perspective – Walson

Recommendations

8. *Bill & Melinda Gates Foundation.* The Advisory Committee welcomes the announcement by the Bill & Melinda Gates Foundation regarding its new STH research strategy, expresses its support for this effort, and looks forward to it unfolding and to the results from the planned studies.

9. *Diagnostic tests.* The Advisory Committee welcomes recent advances in PCR-based diagnostics for STH and encourages further work on the diagnostic tools and their evaluation and application in the field.

10. *Evidence base for STH control.* The STH Advisory Committee recognizes the challenges highlighted by the recent Cochrane Review and the surrounding media attention, both for rigorously documenting the range of benefits of deworming and for communicating these benefits. The Committee encourages further research to strengthen the evidence base, welcomes plans by the Bill & Melinda Gates Foundation to support a systematic review on STH control by the Campbell Collaboration, and urges CWW to work with the STH Coalition to further sharpening messages for communicating to the public.

Emerging Role of the STH Advisory Committee

Objective

Clarify and strengthen the role of the STH Advisory Committee Review challenges and progress toward current milestones on the WHO roadmap for STH control.

Agenda Item

2. Emerging Role of STH Advisory Committee
 - a. STH Advisory Committee – structure, membership, role - Addiss

Recommendations

10. *Charter.* The STH Advisory Committee approves the revised charter, dated 23 October, 2015.

11. *Advisory Committee.* The STH Advisory Committee encourages WHO to utilize the resource of the Committee and to establish more direct and formal linkages with the Committee. The Committee requests that WHO explore opportunities for such linkages (e.g., with the STAG sub-committee on monitoring and evaluation or through the Collaborating Center mechanism) and update the Chair of the Committee.

Annex A.

Agenda

Soil-Transmitted Helminthiasis Advisory Committee

24-25 October 2015

Philadelphia, PA

Chair: Juerg Utzinger

Day 1 – October 24, 2015				
	Time	Session	Proposed Presenter(s)	Materials
STH Advisory Committee	8:00 – 8:30	Breakfast		
	8:30 – 9:15	1. Opening session <ol style="list-style-type: none"> a. Welcome (10) b. Introductions (15) c. Announcements (5) d. Implementation of Recommendations from 2014 STH Advisory Committee Meeting (15) 	Utzinger Utzinger Addiss, Belizario, Mwandawiro	Participant list Recent Publications 2014 Recommendations
	9:15 – 9:30	2. Emerging Role of STH Advisory Committee <ol style="list-style-type: none"> a. STH Advisory Committee – structure, membership, role (5) b. Discussion (10) 	Addiss Utzinger	STH AC Members List
Program Updates	9:30 – 10:30	3. Updates: Progress and challenges in global STH control - 1 <ol style="list-style-type: none"> f. Progress and challenges in STH control (20) g. WHO WASH-NTD Global Strategy (15) h. Discussion (25) 	Montresor Fleming	WHO WASH Strategy
	10:30 – 11:00	Coffee Break		
	11:00 – 12:15	4. Updates: Progress and challenges in global STH control - 2 <ol style="list-style-type: none"> a. STH Coalition (15) b. Unreported STH treatments (15) c. Availability of quality drug for treatment of preschool-age children (10/10) d. Discussion (25) 	Anyanwu Gass Baghaki and Ajello	Harris et al; Addiss
	12:15 – 1:30	Lunch Break		
Monitoring & Evaluation	1:30 – 3:30	5. Technical issues: Monitoring and evaluation - 1 <ol style="list-style-type: none"> a. Global STH Indicators and Milestones for monitoring progress for the London Declaration ‘scorecard’ (45) b. Global STH Indicators: Parasitologic monitoring (75) 	Belizario Utzinger	Parasitologic Monitoring, Indicators and Milestones NTD Master Plan Analysis, Montresor et al., Deming et al.
		3:30 – 3:50	Coffee Break	
	3:50 – 5:00	6. Technical issues: Monitoring and evaluation - 2 <ol style="list-style-type: none"> a. Transition from LF to STH: Programmatic implications; utility of TAS – STH; research issues (70) 	King, Montresor, & Wainwright, Bradley	

Day 2 – October 25, 2015				
	Time	Session	Proposed Presenter(s)	Materials
Research	8:00 – 8:30	Breakfast		
	8:30 – 10:00	7. Operational Research – Brief updates and late-breaking highlights j. STH research in SCORE (5) k. STH research – Filling the Gaps (5) l. STH research in DOLF (10) m. NTD Modelling Consortium (5) n. STH and WASH, Bangladesh (5) o. STH and WASH (5) p. STH risk mapping (5) q. Cost-effectiveness of drug administration for schistosomiasis and STH (5) r. STH in women of reproductive age (5) s. Discussion (40)	Colley Rebollo Fischer Hollingsworth Benjamin-Chung Freeman Utzinger Lo Gyorkos	Lo et al
	10:00 – 10:30	Break		
	10:30 – 11:15	8. BMGF – STH operational research strategy b. BMGF – STH research strategy (30) c. Discussion (15)	Brooker	
	11:15 – 12:00	9. New operational research on interrupting STH transmission c. Field studies on feasibility of elimination of STH (15) d. Interrupting transmission in Kenya (15) d. Discussion (15)	Walson & Littlewood Pullan & Mwandawiro	
	12:00 – 12:30	10. New developments in STH diagnostics a. PCR diagnostics (15) b. Discussion (15)	Williams	
	12:30 – 1:30	Lunch Break		
	1:30 – 3:00	11. Implications of the Cochrane Review for STH research a. Synopsis of session in COR-NTD meeting (10) b. Perspective – impact at the national level (10) c. Perspective for moving forward (10) d. Discussion (60)	Addiss Mwandawiro Walson	Cochrane Review Mwandawiro's Blog STH Coalition Letter
	3:00 – 3:30	12. Synthesis, summary, and wrap-up	Utzinger	

Annex B.

Participant List
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 24-25 October 2015
 Philadelphia, PA
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