

DRAFT
Procedures for Verification of the Absence of Transmission of Lymphatic Filariasis

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Background

In 1994, the International Task Force for Disease Eradication identified lymphatic filariasis (LF) as one of only 6 diseases “that possibly could be eradicated,” and in 1997 the World Health Assembly called for the “global elimination of lymphatic filariasis as a public health problem”. In 1998, the Global Program to Eliminate Lymphatic Filariasis (GPELF) was established, with the dual goals of interrupting transmission of the parasite and providing care to persons who suffer from filarial disease.

Currently, the World Health Organization (WHO) considers 83 countries endemic for lymphatic filariasis. In some of these countries, recent evidence suggests that transmission may have been interrupted. This document 1) outlines a proposed process for international verification of the interruption of transmission of lymphatic filariasis from formerly-endemic countries; and 2) provides a proposed format for the dossier that must be submitted by the Ministry of Health (MoH) of formerly-endemic countries to request official verification from WHO.

Proposed Verification Process

- 1) The MoH notifies WHO of its intent to prepare and submit a detailed dossier describing the evidence for interruption of filariasis transmission throughout the country.
- 2) The MoH may request assistance in preparing the dossier.
- 3) The National LF Programme Manager submits the dossier to WHO for initial screening. If required, WHO will request supplemental information from the country programme.
- 4) The National LF Programme Manager presents the dossier to the Regional PRG for review. The Regional PRG:
 - a. reviews the proposal;
 - b. can propose to WHO that an assessment team visit the country; and
 - c. if in agreement that the evidence in the dossier is adequate to assure that transmission has been interrupted, recommends a formal review by the Global LF Technical Advisory Group (TAG).
- 5) The TAG, using its Sub-Group on Monitoring and Evaluation (M&E) and such additional expertise as that Sub-Group desires, reviews the

recommendations of the Regional PRG and gives its recommendations to WHO to either:

- a. accept the claim of the country regarding interruption of transmission, resulting in its removal from the list of filariasis-endemic countries; or
 - b. recommend further measures to be taken by the country to complete verification of interruption of transmission.
- 6) If the TAG recommends to WHO that interruption of filariasis transmission be verified, WHO will:
- a. Send an official document (e.g., letter) to the MoH confirming that interruption of filariasis transmission has been verified.
 - b. Remove the country from official WHO maps and lists of filariasis-endemic countries.
 - c. Provide recommendations to the MoH regarding ongoing surveillance activities for filarial infection.

The Dossier

The dossier should present, in an organized fashion, the evidence for filariasis elimination for the entire country. If geographically separate foci existed within a country, they should be dealt with separately.

Terms that are used at a national level that may not be understood internationally should be defined (e.g., “imported case”, “endemic district”).

Spatial presentation of data is encouraged. At a minimum, maps should be included that show each implementation unit, as well as a national or regional-level map indicating endemic and non-endemic areas.

Dossier Contents

1. General description

The general description should include information on the following, if available:

- Geographic and economic features of the country, particularly as they relate to risk of filariasis transmission.
- The health system, with an emphasis on the adequacy of the health system to detect affected persons and provide them treatment.
- The geographic distribution, feeding behavior, density, and competence of the vector mosquitoes
- Immigration patterns to and from filariasis endemic areas (including other countries).

- The occurrence of lymphatic filariasis in neighboring countries and the status of filariasis control or elimination efforts in those countries.
- The description of any case management activities, with emphasis on how they may have promoted case-finding and the identification of areas of on-going transmission

2. History of lymphatic filariasis

- A detailed description, including maps, of historic foci of lymphatic filariasis transmission, as documented by both government and research efforts. This should include a review of data on prevalence and intensity of filariasis infection in humans and vector mosquitoes.
- Evidence for the absence of filariasis in areas considered non-endemic. Information should be provided on how non-endemic areas were defined and on any surveillance done in these areas to provide assurance that they remain non-endemic.
- A description of filarial disease, including geographic distribution, and prevalence.
- Description and history of measures taken to control or eliminate other vector borne diseases (e.g., malaria, dengue).

3. Interventions

- A detailed description of all measures to control or interrupt transmission in each focus. This description should include details of screening, selective treatment, and mass drug administration (MDA). Information should be provided on the drugs used, doses, frequency of administration, and duration of treatment.
- Ancillary measures, such as environmental and economic improvement, vector control, and other relevant interventions, such as elimination or control activities targeting other vector borne diseases (e.g., malaria eradication efforts).

4. Assessment of interventions

- A detailed description of surveys and studies conducted to evaluate the impact of these measures (e.g., microfilaremia surveys). This chapter would include data from sentinel sites and surveys for antigenemia, as currently recommended by WHO, as well as other surveys or evaluations that were conducted before the GPELF was established. It would also include any sampling undertaken as part of the decision to stop MDAs or other interventions.
- Details should be provided on sampling methods and procedures that were used to assess baseline prevalence, monitor the program, and assess whether the interventions were successful.

5. Surveillance

- A full review of any surveillance activities undertaken since MDAs and other interventions were stopped, including a description of case follow-up activities completed for each positive case detected.
- Review of the filariasis case reports through routine disease surveillance or other systems for case detection.
- Evidence that adequate sampling or surveillance was conducted in areas that were previously endemic areas and in areas that were of uncertain endemicity during initial mapping (if relevant).
- Details on surveys done in cross-border areas and in immigrants from filariasis-endemic areas (e.g., date of surveys, number of persons tested, test results, follow-up of any mf-positives).
- Demonstration that any positive cases detected following MDA represented isolated events not traceable to an area of transmission. If an area of potential transmission was discovered, evidence should be presented that subsequent interventions (e.g., MDA or selective treatment) were successful.

6. Additional data that support the elimination of lymphatic filariasis

7. Bibliography

- Published articles on lymphatic filariasis, its geographic distribution and control in the country
- Summaries of any relevant unpublished studies, including theses and dissertations.

Sources and Reference Documents

Chuke SO, Addiss DG. Lymphatic filariasis in the Americas: An epidemiologic history. Atlanta, Georgia: CDC, U.S. Department of Health and Human Services, 2002.

Editorial Board of Control of Filariasis in China. *Control of Lymphatic Filariasis in China*. Western Pacific Regional Office of World Health Organization, 2003.

WHO. Preparing and implementing a national plan to eliminate lymphatic filariasis. WHO/CDS/CPE/CEE/2000.16.

WHO. Report of a WHO informal consultation on epidemiologic approaches to lymphatic filariasis elimination: Initial assessment, monitoring, and certification. Atlanta, 2-4 September, 1998. WHO/FIL/99.195

Certification document

WHO LF-Technical Advisory Group, Monitoring and Evaluation Sub-Group. Verification of Absence of Transmission for Lymphatic Filariasis Elimination Programs: Criteria, Strategies and Procedures for Different Country Situations. Draft Guidelines, 8 April, 2004.

WHO. Outline for Verification of Absence of Transmission. October 2004. Draft document.

WHO/WPRO. World Health Organization Mission to China for the Preparation of Documentation for the Official Verification of Elimination of Lymphatic Filariasis 10-18 June, 2004. Unpublished report.

