PAN AMERICAN HEALTH ORGANIZATION
WORLD HEALTH ORGANIZATION

48th DIRECTING COUNCIL

Washington, D.C., USA, 29 September to 3 October 2008

Provisional Agenda Item 4.6

CD48/10 (Eng.)
6 August 2008
ORIGINAL: SPANISH

TOWARD THE ELIMINATION OF ONCHOCERCIASIS (RIVER BLINDNESS) IN THE AMERICAS

Introduction

1. The initiative for eliminating onchocerciasis from the Americas was a response to Resolution CD35.R14, adopted by the 35th Directing Council of the Pan American Health Organization in 1991, which called for the elimination of certain diseases in the Region—among them, onchocerciasis-related eye disease–by 2007. The resolution sought also to take advantage of a donation of ivermectin, a safe and effective microfilaricide, to the global onchocerciasis elimination initiative. As a result, in 1992 the Onchocerciasis Elimination Program for the Americas (OEPA) was created with two goals: 1) to eliminate all new (eye) disease caused by *Onchocerca volvulus* infection by 2007, and 2) to eliminate transmission of the parasite in endemic countries or foci, where possible. There have been no new cases of blindness from onchocerciasis in the Region of the Americas, and at the end of 2007, new cases of eye infection and disease had been found in only four of the 13 foci of the six endemic countries. Since there are still four foci with eye infections, and transmission has not been interrupted in all foci, the OEPA proposes that a new date be considered for achieving the goals (2012) in order to encourage the countries to meet them.

Background

2. Onchocerciasis (also known as river blindness or Robles' disease) is found primarily in Africa. However, there are also 13 foci in six Latin American countries: Brazil, Colombia, Ecuador, Guatemala, Mexico, and Venezuela (Annex A).

3. Around 500,000 people are at risk of contracting the disease in this Hemisphere. River blindness is found in different populations and ecosystems. In Guatemala and Mexico, local populations of European descent and indigenous groups living on coffee

plantations are at the greatest risk, while in Ecuador and Colombia, the disease strikes people living along riverbanks, chiefly Afro-descendants and indigenous populations. The Yanomami, a nomadic indigenous people living along the Brazil-Venezuela border, is one of the most affected groups, since its home is the Amazon jungle, where exposure to the disease is constant. However, the Yanomami represent only 3% of the at-risk population in Latin America, the majority of which (93%) lives in three of the six endemic countries: Guatemala, Mexico, and Venezuela.

4. Headquartered in Guatemala, the OEPA is the entity in charge of the technical operations and coordination of a multinational multiagency coalition. The OEPA partnership includes the six endemic countries, the Pan American Health Organization/World Health Organization (PAHO/WHO) the Carter Center, the Lions Club, the U.S. Centers for Disease Control and Prevention (CDC), the Bill & Melinda Gates Foundation and many more partners. PAHO is a voting member that participates in the OEPA's semiannual meetings.

OEPA Program

5. The strategy of the OEPA has been to strengthen the ministries of health in the six endemic countries, so that they can distribute ivermectin treatments on a massive scale every six months. Under this strategy, treatment should be provided for at least 85% of the eligible population in the 1,808 endemic communities of the 13 regional foci. The program has two main goals, namely:

- *Goal 1*: Eliminate all new morbidity from *Onchocerca volvulus* by 2007. This can also be interpreted as the elimination of onchocerciasis as a public health problem by 2007.

- *Goal 2*: Eliminate transmission of the parasite in countries or foci where it is possible. Although no deadline is specified, elimination implies that the parasite ceases to exist in the area in question.

Progress Report

6. The regional initiative has made great strides, as seen in the annual progress reports published in the *Weekly Epidemiological Record* of WHO. The six countries have field programs in place that distribute treatment in the 13 foci, achieving the required coverage of over 85% twice a year (Annex B), and they have adopted specific guidelines for certifying elimination of the disease. These guidelines were originally developed by WHO and subsequently modified on the basis of experiences in the field, from the

standpoint of interrupting the transmission and elimination of morbidity (referred to here as eye disease).[1]

7. There have been no new cases of onchocerciasis-related blindness in the Region of the Americas, and new cases of eye infection and disease have been found in only four of the 13 foci (Annex C). With regard to transmission, the OEPA Coordinating Committee (PCC), and the Ministry of Health of Guatemala have decided to suspend treatment in two foci, Santa Rosa and Escuintla. Following the recommendations of the PCC, Ecuador's Ministry of Health has also suspended treatment in the Río Santiago subfocus in Esmeralda Province; and Colombia's Ministry of Social Protection has agreed to suspend treatment in the country's only endemic focus, López de Micay, making it the first country to interrupt transmission of the disease. It is very likely that treatment will be similarly suspended in other foci in 2009, specifically in Oaxaca, Mexico and Huehuetenango, Guatemala.

The Proposal: New Goals of the Regional OEPA Initiative for the Period 2008-2012

8. Under the terms of an independent agreement reached by the PCC and the country programs during the last Inter-American Conference on Onchocerciasis (IACO), held in Quito, Ecuador in November 2007, the new goals for that period are: to complete the elimination of onchocerciasis-related eye disease in the 13 foci of the six endemic countries by 2012. However, the best way of sustaining the significant progress made in eye health through this initiative is to interrupt transmission of the infection permanently in the Region. The second goal will be to complete the interruption of parasite transmission in the Region by 2012, making that year the last in which treatments would be distributed in the Region, and, in compliance with the certification guidelines, which call for a three-year period of compulsory epidemiological surveillance following the interruption of transmission, making 2015 the deadline for completing the regional elimination of transmission of this disease. These conclusions were also endorsed during the IACO.

9. The *updated goals* for onchocerciasis elimination in the Region are therefore:

(a) Eliminate new onchocerciasis-related eye disease in all foci by 2012. This will entail sustaining achievements in the nine foci where eye disease has already been eliminated, achieving complete elimination by 2012 in the four foci where it still exists, as demonstrated by epidemiological evaluations.

[1] World Health Organization. 2001. Certification of Elimination of Human Onchocerciasis: Criteria and Procedures. WHO/CDS/CPE/CEE/2001.18b, WHO, Geneva 2001.

(b) Interrupt onchocerciasis transmission in the 13 foci by 2012 (the last year for the distribution of treatment) and complete the three-year post-treatment epidemiological surveillance phase by 2015.

10. The impact of the program will be assessed by examining the indicators of success (ophthalmological, parasitological, serological, and entomological) found in paragraph 11, below. In-depth epidemiological evaluations will be programmed and carried out in 40 sentinel communities in the endemic areas and during post-treatment surveillance; entomological and serological indicators will be measured for the most part.

11. As indicators of success, elimination should be deemed to have been achieved in a country when appropriate monitoring of endemic foci has shown the following:

(a) *Elimination of new eye disease*: Permanent onchocerciasis-related eye injuries or blindness are irreversible; thus, they will be present until the person dies. Emphasis will therefore be placed on reversible (new) injuries attributable to *O. volvulus* microfilariae observed in the anterior segment of the eye, defining the absence of disease as less than 1%.

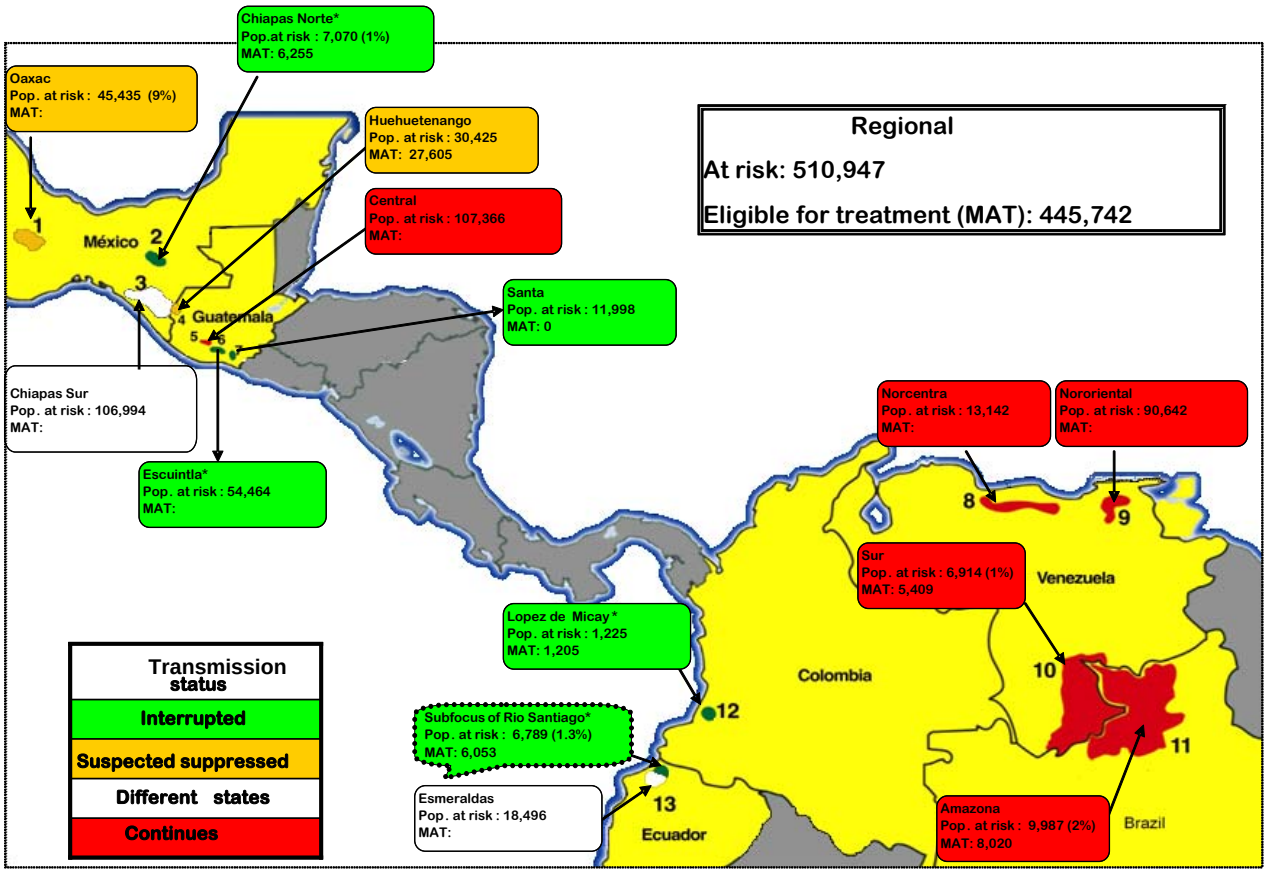
(b) *Elimination of transmission*: There are two indicators: a) less than one larva in the infective stage in a sample of 2,000 flies examined through PCR, and b**)** the absence of detectable specific antibodies for *O. volvulus* in school-aged children, which will be interpreted as less than one new case per every 1,000 (< 0.1% in children).

Action by the Directing Council

12. After it examines the report, the Directing Council is requested to consider the recommendations issued by the 142nd Session of the Executive Committee in Resolution CE142.R3 (see Annex E).

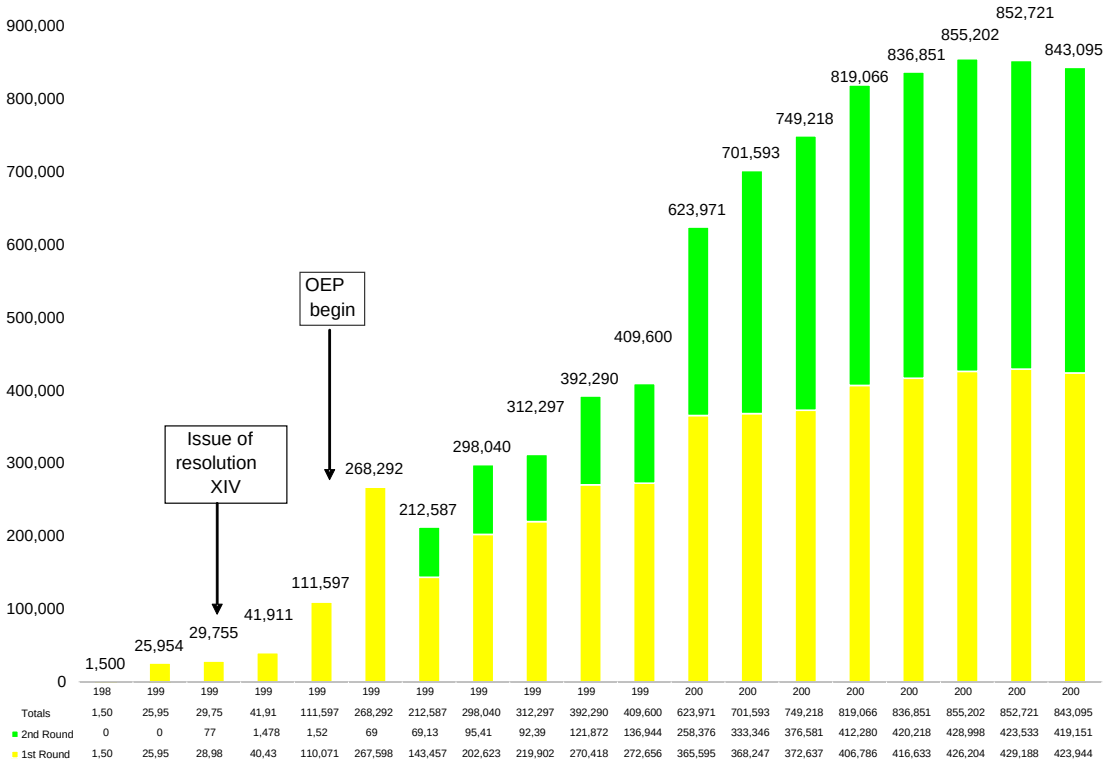
Annexes

Geographical distribution and status of onchocerciasis transmission in the 13 foci of the Americas



*Transmission declared interrupted by OEPA in 2007.

Ivermectin Treatment in the Americas, 1989-2007



Current eye disease and transmission status in the Region of the Americas

Foci	Has blindness been eliminated?	Has eye disease been eliminated?	Transmission Status
Santa Rosa, GU	Yes	Yes	Interrupted in 2006
López de Micay, CO	Yes	Yes	Interrupted in 2007
Escuintla, GU	Yes	Yes	Interrupted in 2007
Northern Chiapas, MX	Yes	Yes	Interrupted in 2007
Huehuetenango, GU	Yes	Yes	Suspected elimination
Oaxaca, MX	Yes	Yes	Suspected elimination
Esmeraldas, EC	Yes	Yes	Interrupted in the Río Santiago subfocus in 2007 Different states
Southern Chiapas, MX	Yes	Yes	Different states
Central, GU	Yes	Yes	Continues
North-central, VZ	Yes	No (1.7%)	Continues
Northeastern, VZ	Yes	No (4%)	Continues
Amazonas, BR	Yes	No (6.5%)	Continues
South, VZ	Yes	No (24.4%)	Continues

I. Weekly Epidemiological Record. Onchocerciasis (river blindness): Report from the 16th InterAmerican Conference on Onchocerciasis, Antigua, Guatemala. WER 2007; 82:314-316
II. Details on the development of assessment criteria (OEPA, 2008)

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Annex D

ANALYTICAL FORM TO LINK AGENDA ITEM WITH ORGANIZATIONAL AREAS

1. Agenda Item: 4.6	**2. Agenda Title:** Toward the Elimination of Onchocerciasis (River Blindness) in the Americas

3. Responsible Unit: HDM/CD/P

4. Preparing Officers: Steven Ault and Maria Rebollo

5. List of collaborating centers and national institutions linked to this Agenda item:
Ministries of health of the six endemic countries: Brazil (MS/SVS/PCO), Columbia (Instituto Nacional de Salud), Ecuador, Guatemala, Mexico, Venezuela
OEPA – Onchocerciasis Elimination Program of the Americas (in Guatemala City)
Carter Center, Atlanta Georgia
US CDC Division of Parasitic Diseases, Atlanta Georgia

6. Link between Agenda item and Health Agenda of the Americas:
Onchocerciasis is named as one of the neglected diseases in the Health Agenda of the Americas targeted for elimination (see paragraph 22, paragraph 60, and footnote 6).

7. Link between Agenda item and Strategic Plan 2008-2012:
Onchocerciasis transmission interruption is Indicator 1.3.9 under Strategic Objective 1 (Communicable Diseases) of the Plan (see page 30 in the English version of the Plan).

8. Best practices in this area and examples from other countries within AMRO:
Onchocerciasis: OEPA (in which PAHO participates as a technical and voting member) is the only agency in the Region undertaking onchocerciasis elimination. It has successfully pioneered a mass drug administration routine of twice-yearly treatment of all eligible communities and individuals at risk of the disease in the 13 endemic foci. This treatment strategy is noted as being more effective than the once-yearly treatment provided in the African endemic countries, in lowering microfilaria levels and reducing ocular morbidity.

9. Financial implications of Agenda item:
Onchocerciasis: Currently OEPA is financing the elimination effort (target 2015) in the Region with financial support from the Carter Center and other donors. Funding to OEPA is not guaranteed through 2015 but the Carter Center is taking principle responsibility for resource mobilization to ensure the program meets its targets by 2015. PAHO/WHO will be expected to be the main funder and coordinator of the external evaluation team and process needed by each country to obtain WHO Certification of Elimination; these costs will not be incurred before 2011 and are estimated in the financial and administrative implications for implementing the resolution (item 3.a) for this Agenda item. Given the trend and extraordinary recent rise in the cost of airfare due to the global price of oil/jet fuel, the estimated costs of airfares for the period beyond 2009 will have to be recalculated.

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142nd SESSION OF THE EXECUTIVE COMMITTEE

Washington, D.C., USA, 23-27 June 2008

CD48/10 (Eng.)
Annex E
ORIGINAL: SPANISH

RESOLUTION

CE142.R3

ONCHOCERCIASIS: PROGRESS REPORT

THE 142nd SESSION OF THE EXECUTIVE COMMITTEE,

Having reviewed the report of the Director, *Onchocerciasis: Progress Report* (Document CE142/18),

RESOLVES:

To recommend that the Directing Council adopt a resolution along the following lines:

THE 48th DIRECTING COUNCIL,

Having reviewed the report of the Director, *Toward the Elimination of Onchocerciasis (River Blindness) in the Americas* (Document CD48/10);

Considering the human suffering and social costs associated with the loss of vision and deforming skin lesions attributable to onchocerciasis (river blindness), which poses a threat to approximately 500,000 at-risk people in the Americas;

Expressing appreciation for donor support to achieve global onchocerciasis control;

Noting that the 23rd Pan American Sanitary Conference, held in September 1990, issued a call to identify diseases that could be eliminated by the end of that century or the beginning of the next and that, in response, PAHO developed a regional strategy (Resolution CD35.R14, 1991) aimed at guaranteeing semiannual treatment to all communities that require it to eliminate onchocerciasis as a public health problem in the Americas by 2007;

Considering that in response to Resolution CD35.R14, an international initiative known as the Onchocerciasis Elimination Program in the Americas (OEPA) was launched in cooperation with the governments, PAHO, nongovernmental organizations, donors, and other stakeholders;

Recognizing the significant progress made to date by the national authorities and the OEPA in onchocerciasis elimination in the Americas through the promotion and strengthening of programs in the six endemic countries of the Region (Brazil, Colombia, Ecuador, Guatemala, Mexico, and Venezuela); and

Bearing in mind that the representatives of the six countries that attended the 17th Inter-American Conference on Onchocerciasis in 2007 and the OEPA Program Coordinating Committee (PCC) have made a commitment to achieving the interruption of onchocerciasis transmission throughout the Region by the end of 2012 and that would be the last year for the mass distribution of Ivermectin in the Region, followed immediately by a three-year epidemiological surveillance phase to certify elimination,

RESOLVES:

1. To urge the Member States to:

(a) reaffirm their commitment to the goal originally proposed in 1991 by the 35th Directing Council of the Pan American Health Organization in Resolution CD35.R14, which calls for achieving the elimination of morbidity from onchocerciasis in the Americas;

(b) complete the elimination of morbidity from onchocerciasis and interrupt transmission of the parasite within their borders by the year 2012, mobilizing all relevant sectors, affected communities, and NGOs through:

- adequate financial support to ensure that national programs achieve treatment coverage of at least 85% of all eligible individuals;

- effective utilization of donated treatments;
- application of the WHO certification guidelines for the suspension of mass treatment.

(c) invite other specialized agencies of the United Nations system, bilateral and multilateral development agencies, NGOs, foundations, and other stakeholders to:

- increase the availability of resources for national onchocerciasis elimination programs and the OEPA to completely eliminate transmission of the disease in the Region;
- support the activities of the OEPA and its Program Coordinating Committee, made up of representatives from PAHO, the CDC, the Carter Center, the Ministries of Health, and onchocerciasis experts;
- support and attend the Annual Inter-American Conferences on Onchocerciasis (IACO) and endorse the initiatives developed by, or in coordination with the OEPA Program Coordinating Committee (PCC).

2. To request the Director to:

(a) support implementation of the WHO criteria for certifying the elimination of morbidity and transmission in the affected countries;

(b) strengthen collaboration with the six endemic countries, especially along the Brazil-Venezuela border, where onchocerciasis affects the indigenous Yanomami population;

(c) promote closer collaboration among onchocerciasis elimination programs in the Americas, the specialized agencies and organizations of the United Nations system, bilateral development agencies, and NGOs, as well as other stakeholders;

(d) periodically report on progress in the implementation of activities.

(Ninth meeting, 27 June 2008)

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Annex F

Report on the Financial and Administrative Implications for the Bureau of the Resolutions Proposed for Adoption by the Directing Council

1. Resolution: Onchocerciasis: Progress Report

2. Linkage to program budget

Area of work	**Expected result**
HDM/CD/P	RER 1.3.9 of PAHO MTSP

3. Financial implications

a) **Total estimated cost for implementation over the "life-cycle" of the resolution (estimated to the nearest US$ 10,000; including staff and activities): TOTAL $100,000**

Lifecycle of 2008-2012:
$50,000 for staff duty travel ($20,000 x 2.5 years)
$50,000 for cost of monitoring and external evaluation teams called by PAHO/WHO.
[Perdiem $220 x 4 p x 8 d x 4 trips = $28160. Airfare $1600 x 4 p x 4 countries = $25600. Total $53760.]

b) **Estimated cost for the biennium 2008-2009 (estimated to the nearest US$ 10,000; including staff and activities):**

TOTAL $20,000

Staff duty travel:
PCC and IACO meetings of OEPA.
[Perdiem $200 x 12 d x 2 yr = $4800; airfare: $1600 x 4 trips = $6,400.Total of $11200]
Monitoring and evaluation missions with OEPA.
[Perdiem $220 x 1 p x 12 d x = $2640; airfare $1600 x 2 trips = 3200. Total of $5840.]

c) **Of the estimated cost noted in (*b,)* what can be subsumed under existing programmed activities?** Staff duty travel to OEPA meetings (PCC, IACO), through RB funds and current funds from WHO NTD Dept.. Staff travel to participate in M&E missions will need to be provided by WHO NTD program or another source.

4. Administrative implications

a) **Implementation locales (indicate the levels of the Organization at which the work will be undertaken and identify the specific regions, where relevant):**

PAHO HQ, WHO-Geneva, Guatemala City (HQ of OEPA), 13 foci in 6 endemic countries (BRA, COL, ECU, GUT, MEX, VEN)

b) **Additional staffing requirements (indicate additional required staff full-time equivalents, noting necessary skills profile):**

No additional full-time staffing in PAHO; part of time of new temporary (11-month) STP post at P-3 level (funded by WHO) will include onchocerciasis. Temporary Advisors (TA) will be needed to participate in external evaluations (technical experts in onchocerciasis, tropical diseases, entomology and ophthalmology).

c) **Time frames (indicate broad time frames for the implementation and evaluation):**

2008-2012 for implementation
2008-2015 for monitoring and evaluation, including 3-year surveillance of each focus after interruption of transmission is declared and MDA stopped.