Lymphatic Filariasis Elimination - RPRG Newsletter of the Americas

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Welcome to the 5th LF Elimination Regional Meeting, Paramaribo, Suriname!

Welkom *to t*he 5th Regional Program Managers Meeting for the Elimination of Lymphatic Filariasis and the 4th Meeting of the Regional Program Review Group for the Americas is being held this year in the beautiful city of Paramaribo, capital of Suriname. This year we are expecting about 40 participants arriving from at least 10 countries and the headquarters of WHO in Geneva.

Some of the more interesting topics of discussion anticipated for this year's meeting are reports on the history of the process which resulted in the apparent elimination of transmission of LF in Suriname; the new management structure of the Global Alliance for the Elimination of LF resulting from the GAELF meeting in Cairo earlier this year; operational research of the entomological aspects of of LF transmission; and integration of LF activities with other disease control or elimination efforts. Other special events will include presentation of letters of recognition by PAHO/WHO to the governments of Suriname, Trinidad & Tobago, and Costa Rica for their efforts which seem to have eliminated transmission in these countries, a special award to be presented to the family of our deceased colleague Prof. Dr. Balthus Oostburg, and the announcement of a new prize for Surinamese working in parasitology also in honor of Prof. Oostburg.

Back-to-back with this meeting will be the 4th Meeting of the RPRG-Americas which will address the technical business of the RPRG with respect to donations of drugs for elimination of microfilaremia and interruption of LF transmission. The RPRG meeting will also include some special topics such as the impacts of this year's unusual hurricane situation in the Caribbean, and LF as a part of the new WHO Neglected Diseases Initiative under development. As always, contributions and suggestions for the next newsletter are welcome, and very critical for its success. Please pass them to Steven Ault, PAHO/WHO Brazil (see e-mail address on back page).

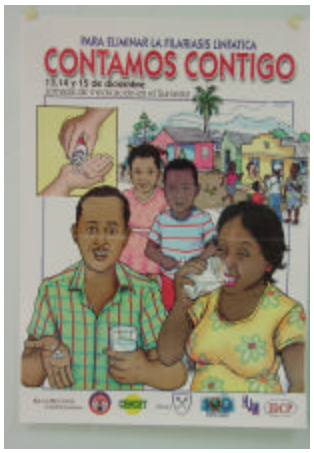
Photo of Governor's Palace, Paramaribo, Suriname courtesy of http://www.paramaribo.com/

Inside this issue:

Photo of Dutch architecture in Paramaribo, Suriname, courtesy of http://www.paramaribo.com/

Thanks to our Partners in Suriname and Abroad

.The PAHO/WHO Secretariat would like to extend our deepest thanks to our local colleagues who have put tremendous efforts into organizing these meetings in the beautiful port city and capital, Paramaribo, Suriname: PAHO/WHO country advisors in Suriname Marthelise Eersel and Gustavo Bretas; PAHO/WHO Representative to Suriname Stephen Simon; and PAHO's local administrative staff Neetu Vyas and Suzanne Summerfield. We would also like to congratulate Dr. Eersel for being recently selected to fill a high-level post in the Bureau of Public Health of Suriname. Additional, we would like to thank other PAHO staff who helped us organize this meeting: Clodoaldo Matos, Magaly Clavijo, Maria Boyer and Rita Suarez. Generous and gracious financial support for various aspects of these meetings came from PAHO/WHO Geneva and Washington DC,, Bill & Melinda Gates Foundation, GSK Inc., Liverpool School of Tropical Medicine LF Support Centre, Emory University Rollins School of Public Health LF Support Center, CDC/HHS and GAELF.



Educational Poster used before the MDA treatment round began, to encourage community participation in treatment., December 2002. Photo courtesty of Barney Cline

Changes and Promotions in the Region

Since we last met in Maceio, Brazil in September 2003, Guillermo Gonzalez has left his post as Director of CENCET/Ministry of Health in the Dominican Republic, and Jose Manuel Puello has assumed this high level post. Guillermo now works as an epidemiological researcher on a Johns Hopkins project on cysticercosis/taeniasis in Tumbe, Peru, but has continued to work as RPRG Chairman through October this year. John Ehrenberg was promoted from Regional Advisor in Communicable Diseases to Chief of Communicable Diseases at PAHO/WHO Washington DC as of August 2004. Steven Ault of PAHO/WHO Brazil is assuming some of John's former duties including coordination of PELF support in the Americas region (AMRO) of WHO. In Brazil, Helen Freitas assumed the duties of the national coordinator of the PELF, while João Batista Vieira continues to oversee PELF and other neglected disease programs in the Secretariat for Health Surveillance, Ministry of Health/Brazil. Audenei Cavalcante changed positions in the Municipal Health Secretariat of Maceio, Brazil where she now focuses on developing the lymphoedema and urogenital treatment programs for LF patients, and conducting a morbidity survey in Maceio. Francisco Paniagua, PAHO/WHO Costa Rica, has retired and PAHO coordination for communicable diseases including PELF-related activities has been assumed by Humberto Montiel. Marthelise Eersel has left PAHO/WHO Suriname to assume a high-level post in the Bureau of Public Health in Suriname as of the beginning of this month (October). Gustavo Bretas now coordinates PELF-related activities in PAHO/WHO Suriname. Gina Watson is coordinating PELF-related activities in PAHO/WHO Trinidad.

Abandoned and/or unimproved pit latrines are ideal breeding sites for *Culex quinquefasciatus*, and should be filled up with dirt and replaced with VIP latrines or sanitary sewerage. Photo by Steven Ault, 2003.

Integrated Vector Management, part 2

The main strategy for eliminating LF is based on the mass-drug administration (MDA) approach which kills the microfilariae in humans, but no control strategies have been developed specifically for the mosquito vector. For example, it is recommended that "integrated vector control wherever feasible" should be conducted. Here is outlined some of the available strategies or approaches which can be employed to control *Culex quinquefasciatus* mosquitoes and which can possible prevent the re-infection of treated communities in the Americas. The control of *Cx. quinquefasciatus* mosquitoes can be effective and sustainable if properly planned and coordinated. To control mosquito breeding sites and adult populations it is recommended that numerous strategies be adopted by the community and vector control departments to control breeding habitats.

A. Pit latrines- Using a physical barrier which would reduce or eliminate the breeding of immature stages of the mosquitoes (in pit latrines): (1) Using a layer of oil which will block the siphons and trumpets of the larvae and pupae respectively thus making it impossible for these immatures to breed atmospheric oxygen; (2) Using expanded polystyrene which will acts in the same way as the layer of oil but is effective when pits become dry and then wet again, the beads will re-float, even if buried under feces in the dry period (in pit latrines).

.Open drainage box for household wastewater is "open house " for *Culex quinquefasciatus* mosquito breeding. However this box can be sealed against mosquitoes. Photo courtesy of Steven Ault, 2003.

Integrated Vector Management, continued

B. Drains, cisterns, septic tanks - using environmental management and source reduction strategies against immature stages: (1) Clearing stagnant drains & use of inverts with a suitable gradient to allow free flow of waste water into the rivers and streams; (2) de-weeding and de-silting drains to allow free flow of waste water; (3) sealing cisterns & storage tanks, replacing broken manhole covers, covering air vents with mosquito netting and sealing septic tank covers.

C. Drains, ponds, disused wells, flooded cellars - using registered chemicals (biocides) & biological control agents to control the vectors: (1) *Bacillus sphaericus,* a biological control agent which is specific & has a fairly prolonged killing effect on immature stages; (2) temephos, an organophosphate insecticide will kill the immature stages & is generally considered to be the least toxic chemical larvicide currently available; (3) *Poecilia reticulata,* the guppy fish which tolerates highly polluted water & can successfully control *Cx. quinquefasciatus* breeding in drains in both urban & rural areas. Areas within the Americas which experience temperatures below 10 degrees C. may use *Gambusia affinis* for the control of mosquito breeding sites associated with ponds, blocked drains and flooded cellars. (Editor´s note—First determine if these fish species do not compete with native fishes). David Chadee, Ministry of Health, Trinidad & Tobago. (to be con´t.)

Links and References about Lymphatic Filariasis

Filariasis Net www.filariasis.net

WHO LF Program and Global Alliance to Eliminate LF
www.filariasis.org

Liverpool School of Tropical Medicine LF Support Centre
www.filariasis.org.uk

WHO/TDR on LF
www.who.int/tdr

WHO Health Topics on LF
www.who.int/health-topics/lymphfil.htm

Centers for Disease Control & Prevention (CDC)
www.cdc.gov/ncidod/dpd/parasites/lymphaticfilariasis

ICMR Pondicherry India
www.pon.nic.in/fil-free/welcome.html

WHO Southeast Asia on LF
http://w3.whosea.org/lymphatic/pdf/lf.pdf

James Cook University (Australia) LF Support Centre
www.jcu.edu.au/school/sphtm/phtm/centers/lf/index.htm

Carter Center on LF
www.cartercenter.org/healthprograms/healthpgm.asp?submenu=healthprograms

GlaxoSmithKline (GSK)
www.gsk.com/filariasis/index.htm

National Institute for Allergy and Infectious Diseases
www.niaid.nih.gov/newsroom/focuson/bugborne01/filar.htm

FIOCRUZ, Recife Brazil
www.cpqam.fiocruz.br/doencas/filariosepesq.htm

InterChurch Medical Assistance Inc. on LF www.interchurch.org/

Ability (an NGO)
www.ability.org.uk/Elephantiasis.html

BINAX http://www.binax.com/

Emory University LF Support Center

Volunteer "medicator" delivering drug treatment to community member in her home in the Dominican Republic, December 2002. Photo courtesy of Barney Cline.

Children of Sanitary District II, Recife, Brazil, presenting their artwork for communicating to other children about the breeding sites of *Culex* mosquitos in their community. Other projects include their art about the symptoms, signs and successful treatments for LF available in their community. Photo: courtesy Steven Ault, 2003

Successful MDA with DEC, Recife, Brazil

Second Round of MDA using DEC completed in Recife, Brazil. In early September this year the Municipal Health Secretariat (SMS) of Recife held the second round of MDA using DEC, in Sanitary District II (a high prevalence focus). Last year's coverage of 18,000 people (children and adults) has been surpassed with nearly 40,000 people being treated this year; over 20,000 new persons were treated this year and overall coverage rate exceeded 85%. The same professional team led by Tereza Lira Maciel, Bernadette Antunes and Demetrius Montenegro of the SMS/Recife planned and implemented this major operation in a *favela* area of the city. Further technical and financial assistance came from the Health Surveillance Secretariat (SVS) of the Ministry of Health and the National Reference Center for Lymphatic Filariasis/Aggeu Magalheus Research Center/FIOCRUZ in Recife. All persons to be treated were registered in advance, and the community received ample public health communications to encourage their full participation. Treatment posts were set up for every block of residents, and individuals who could not come for treatment during the two-day campaign were followed up individually for treatment by members of the local Family

Recife, continued

Health Program (the primary care service). The community greeted the campaign with pleasure and all activities unfolded smoothly. Steven Ault of PAHO/WHO Brazil and Dorte Wein of the Neglected Diseases Initiative, Communicable Diseases Program (WHO Geneva) observed the MDA campaign, and met with the Honorable Mayor of Recife, Mr. João Paulo to offer congratulations. During the meeting with the mayor, his Excellency expressed his personal support and interest in the LF campaign, and he recalled that he was born and raised in a poorer area of Recife where some of his uncles had suffered from lymphoedema and elephantiasis. The mayor was re-elected this month, and we expect this municipal PELF program to continue and expand. Neighboring cities with LF transmission foci are closely following the lessons learned and results of Recife's efforts. Prepared by Steven Ault.

Community health workers of the Family Health Program, Sanitary District II, Recife, Brazil, making house calls for morbidity treatment. Photo by Steven Ault, 2003

Pan American Health Organization/ World Health Organization

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The **Pan American Health Organization (PAHO)** is an international public health agency with 100 years of experience working to improve health and living standards of the people of the Americas. It enjoys international recognition as part of the United Nations system, serving as the **Regional Office for the Americas of the World Health Organization (AMRO/WHO)**, and acts as the health organization of the **Inter-American System (OAS)**.

PAHO is based in Washington, D.C., and has scientific and technical experts at its headquarters, in its 27 country offices, and its nine scientific centers, all working with the countries of Latin America and the Caribbean to deal with priority health issues. The Organization's essential mission is to strengthen national and local health systems and improve the health of the peoples of the Americas, in collaboration with Ministries of Health, other government and international agencies, nongovernmental organizations, universities, social security agencies, community groups, and many others. Website: www.paho.org

Announcements and Deadlines

03-05 September 2003. 4th Annual LF Program Managers Meeting Maceió, Brazil.

06 September 2003. 3rd Annual RPRG Meeting, Maceió, Brazil

WHO/TDR. Call for research grant applications for lymphatic filariasis, see http://www.who.int/tdr/diseases/lymphfil/workplans.htm.

WHO TDR Tropical Disease Research Grant deadlines, see http://www.who.int/tdr/grants/deadlines/default.htm.

PAHO Research Grants Program, http://www.paho.org/English/HDP/HDR/RPG/ or http://www.paho.org/Spanish/HDP/HDR/RPG/

NIH-Fogarty International Center research and training grants, at http://www.nih.gov/fic/programs.html.

NIH-Fogarty Global Infectious Disease Research Training Program, at http://www.nih.gov/fic/programs/infectiousdisease.html

NIH-Fogarty International Training and Research Program in Emerging Infectious Diseases (ITREID), which includes filariasis, at http://www.nih.gov/fic/programs/erid.html

WHO Training Materials on Drug Distribution for LF (learner´s guide and tutor´s guide), available free, see www.filariasis.org

WHO Annual Reports on Lymphatic Filariasis, available free at http://www.filariasis.org/docs/AnnualReport_2001.pdf

WHO RPRG for LF - American Program Review Group, at http://www.filariasis.org/index.pl?iid=2663

AFUTUREFREEOFLF GlobalAlliance

Volunteer “medicator” delivering LF drug treatment during Round 1 of MDA in the Dominican Republic, December 2002. Photo courtesy of Dr. Barney Cline.