

LYMPHATIC FILARIASIS

Key data

- Lymphatic filariasis is a parasitic infection caused by small worms (nematodes) and transmitted by *Culex* mosquitoes. Adult worms lodge in the lymphatic vessels and disrupt the normal functioning of the lymphatic system. The worms can live an average of six to eight years and throughout their life produce millions of small larvae (microfilariae) that circulate in the blood.
- When lymphatic filariasis becomes chronic, it causes lymphedema or elephantiasis (swelling of the skin and other tissues) of limbs and hydrocele. It frequently affects the breasts and genital organs.
- Chronic lymphedema, or elephantiasis, is often accompanied by acute episodes of local inflammation of the skin and lymph nodes and vessels. Some of these episodes are caused by the body's immune response to the parasite. Most of them are due to secondary cutaneous bacterial infections, since the normal defenses have weakened as a result of lymphatic injury. These acute episodes are debilitating, can last weeks, and are the main cause of absenteeism from work among those who have lymphatic filariasis.
- In individuals with chronic manifestations of the disease, elevation of the affected limb, hygiene, prevention, and timely treatment of skin infections are the measures to be followed.
- To interrupt the transmission of filariasis in the Americas, WHO recommends, the annual simultaneous mass administration of two drugs in single dosages (diethylcarbamazine and albendazole) to all eligible people living in endemic areas, over a period of at least 5 consecutive years, as well as integrated vector control measures.
- More than 120 million people are infected worldwide and some 40 million are disfigured and disabled by the disease, and there are more than 947 million people in 54 countries threatened by lymphatic filariasis who require large-scale prophylactic treatment.
- In the Region of the Americas, lymphatic filariasis is caused exclusively by the parasite *Wuchereria bancrofti* (in other regions there are other forms caused by *Brugia malayi* and *B. timori*).
- In this Region, it is estimated that 12.6 million people are still at risk of infection, 90% of them in Haiti. The endemic countries are Brazil, the Dominican Republic, Guyana, and Haiti.
- In 2011, WHO removed Costa Rica, Suriname, and Trinidad and Tobago from the list of countries that are endemic for lymphatic filariasis. It is hoped that over the next few years the four countries that are still endemic will be able to present evidence on transmission interruption and morbidity control, so that they can request verification of elimination of the disease from PAHO/WHO.

PAHO/WHO's response

- In 1997, the World Health Assembly adopted <u>Resolution WHA50.29</u> on the elimination of filariasis as a public health problem.
- In 2009, PAHO adopted <u>Resolution CD49.R19</u> on the elimination of neglected infectious diseases and other poverty-related infections, urging Member States to take the necessary steps to eliminate them as a public health problem by 2015.
- In 2013, the World Health Assembly adopted <u>Resolution WHA 62.12</u> and reaffirmed the 2020 goals for 17 neglected tropical diseases, including lymphatic filariasis. That same year, the Organization of American States (<u>AG/RES.2810(XLIII-O/13</u>) approved <u>Resolution</u> <u>CD49.R19</u> and 23 member countries endorsed the resolution.
- In 2016, the PAHO/WHO Directing Council adopted Resolution <u>CD55.R9</u> aimed at implementing a plan for the elimination of neglected infectious diseases, including filariasis.
- PAHO/WHO collaborates with endemic countries to obtain donated medicines, diagnostic kits, and other supplies needed to interrupt and eliminate transmission. It coordinates these actions through the Regional Program Review Group (RPRG) for elimination of filariasis.