



## LYMPHATIC FILARIASIS

### What is lymphatic filariasis?

- Lymphatic filariasis, commonly known as elephantiasis, is an infection in humans caused by the transmission of certain parasites known as filariae (filarial worms) by mosquitoes, including those of the genus *Culex*, which is widespread in urban and semiurban areas.
- Mosquitoes are infected with microfilariae when they ingest blood after biting an infected carrier. When the microfilariae mature in the mosquito, they become infectious larvae. When infected mosquitoes bite humans, the mature larvae of the parasite are deposited on the skin, and can then enter the body.
- Lymphatic filariasis has asymptomatic, acute, and chronic forms. Most infections are asymptomatic with no external signs or symptoms. However, they damage the lymphatic system and kidneys and alter the immune system. The painful and highly disfiguring manifestations of the disease (lymphedema, elephantiasis, and scrotal inflammation) appear later on and can lead to rejection and social stigma, with a subsequent loss of self-esteem and fewer job opportunities for infected individuals, which can negatively impact their economic and social conditions.
- The disease can be eliminated in the Americas through the simultaneous mass administration of two drugs (diethylcarbamazine and albendazole) once a year to people living in at-risk areas, over a period of at least five consecutive years.
- In areas where the disease is endemic, the recommended preventive measures include the use of screens in windows and doors and mosquito bed nets in homes, as well as the elimination of mosquito breeding sites and application of insecticides in open latrines.

### Key facts

- More than 120 million people are infected with lymphatic filariasis worldwide, and some 40 million are disfigured or disabled by the disease.
- In the Region of the Americas, the disease is caused exclusively by the parasite *Wuchereria bancrofti* (in other regions there are other forms of the disease caused by *Brugia malayi* and *B. timori*).
- Some 12.6 million people are still at risk of infection in the Americas, 90% of them in Haiti.
- Only four countries in the Region are endemic for lymphatic filariasis: Brazil, the Dominican Republic, Guyana, and Haiti.
- In Brazil there is only one remaining active focus limited to the metropolitan area of Recife, in Pernambuco state. An elimination plan based on the administration of the antiparasitic drugs has been implemented there, and the country is very close to elimination.

### PAHO/WHO's response

- In 2009, the PAHO/WHO member states set the goal of eliminating lymphatic filariasis as a public health problem by 2015. In 2016, the countries reaffirmed this commitment by approving the *Plan of Action for the Elimination of Neglected Infectious Diseases 2016-2020*, which includes lymphatic filariasis.
- PAHO/WHO works with endemic countries to obtain donations of medicine, diagnostic kits, and other supplies needed to strengthen prevention and control activities.
- PAHO/WHO monitors and evaluates the progress made in endemic countries towards interrupting and eliminating lymphatic filariasis transmission, and provides technical cooperation to strengthen the ability to monitor and evaluate programs aimed at the elimination of this disease.