# Lymphatic Filariasis

Lymphatic filariasis is a parasitic disease caused by very small (*microscopic*), thread-like worms. The adult worms only live in the human lymph system. The lymph system maintains your body's fluids and fights infections.

## CAUSES

The disease is spread from person to person by mosquito bites. When a mosquito bites a person who has lymphatic filariasis, microscopic worms circulating in the person's blood enter and infect the mosquito. If the infected mosquito then bites you, you can get lymphatic filariasis. The microscopic worms pass from the mosquito through your skin, and travel to your lymph vessels. In your lymph vessels they grow into adults. An adult worm lives for about 7 years. The adult worms mate and release millions of microscopic worms into your blood. Once worms are in your blood, you can give the infection to others through mosquito bites.

You need many mosquito bites over several months or years to get lymphatic filariasis. People living for a long time in tropical or sub-tropical areas where the disease is common are at the greatest risk for infection. Short-term tourists have a very low risk.

## SYMPTOMS

- At first, most people do not know they have lymphatic filariasis. The disease usually is not life threatening, but it can permanently damage your lymph system. Because your lymph system does not work right, fluid collects and causes swelling in the:
  - Arms.
  - Breasts.
  - Legs.
  - For men, the genital area.
- The name for this swelling is lymphedema. The entire leg, arm, or genital area may swell to several times its normal size. This causes hardening and thickening of the skin, which is called elephantiasis. Also, the swelling and the damaged lymph system make it difficult for your body to prevent skin and lymph system infections caused by bacteria.
- Lymphatic filariasis is a leading cause of permanent and long-term disability in countries where it is common. People with the disease can suffer pain, disfigurement, and sexual disability. Communities frequently shun women and men disfigured by the disease. Many women with visible signs of the disease will never marry, or their spouses and families will reject them. Affected people frequently are unable to work because of their disability. This hurts their families and their communities. Poor sanitation and rapid population growth in tropical and subtropical areas of the world, where the disease is common, has created more places for mosquitoes to breed, and has led to more people becoming infected.

## DIAGNOSIS

This disease can be diagnosed by testing the blood for the presence of filarial worms.

## PREVENTION

Prevention includes giving entire communities medicine that kills the microscopic worms and controlling mosquitoes. Avoiding mosquito bites is another form of prevention. The mosquitoes that carry the worms usually bite between the hours of dusk and dawn. If you live in an area with lymphatic filariasis:

- Sleep under a mosquito net.
- Wear protective clothing.
- Use mosquito repellant on your exposed skin between dusk and dawn.

## TREATMENT

- If you have adult worms, you should take a yearly dose of medicine that kills the microscopic worms circulating in your blood. While this does not kill all the adult worms, it does prevent you from giving the disease to someone else. Even after the adult worms die, you can have swelling of your arms, legs, breasts, or genitals. You can keep the swelling from getting worse.
  - Carefully wash the swollen area with soap and water every day.
  - Use anti-bacterial cream on any wounds. This stops bacterial infections and keeps the swelling from worsening.
- Elevate (raise) and exercise the swollen arm or leg to move the fluid and improve the lymph flow.

Most information courtesy of the CDC.

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