



“A Future Free of Lymphatic Filariasis” Case Statement

The Global Alliance to Eliminate Lymphatic Filariasis

Lymphatic Filariasis (LF), often known as “elephantiasis,” is a parasitic disease spread by mosquitoes that afflicts people in Africa, Asia, the Pacific, and the Americas. It threatens one fifth of the world’s population – the same as malaria – and causes enormous disability, yet few people outside of the approximately 80 countries affected by the disease are even aware of it. This is changing, as a coalition of diverse public and private partners is combining its skills and resources for a common purpose – a future free of LF. The Global Alliance to Eliminate Lymphatic Filariasis (Alliance) was stimulated by the knowledge that:

- the cycle of LF transmission can be broken in as little as five years by annual treatment of at-risk communities with two safe and effective drugs, donated by Alliance partners; and
- the disability and suffering of those already afflicted with LF can be greatly reduced through simple hygiene measures and, in some cases, surgery.

This two-pronged approach – to prevent the disease and to reduce disability – distinguishes LF from most other disease eradication programs, which focus only on prevention. Other distinctive features of the LF program include its dramatic impact on intestinal parasites, thus improving overall nutrition and growth, especially among children, and its capacity to integrate treatment activities with other health programs for greater cost efficiency and strengthened health systems.

The remainder of this document will outline briefly the burden of LF, the success to date of the global program, and the very real potential for a future free of LF.

What is LF?

Lymphatic filariasis has been recognized for more than 4,000 years. Over 120 million people are infected, with 40 million of them incapacitated or disfigured. More than a billion are at risk of the disease. Spread by mosquitoes, tiny LF worms live in the body’s lymphatic vessels and over the years can cause devastating symptoms, such as grotesquely swollen limbs and genitals and debilitating fevers and pain. The disease is usually contracted in childhood, often before the age of five. Outward symptoms may not appear for a number of years, or at all, but even those showing no external signs of infection suffer damage to the lymph system and kidneys.



All three adults have lymphedema in their left legs (WHO)

LF is found in both rural and urban areas, typically in the poorest regions. It is a disease of poverty, often linked to poor sanitation and housing quality. The disabling aspects of the disease exacerbate the cycle of poverty as those suffering from LF are often too incapacitated to provide adequately for their families and become ostracized from school and community life. Thus the socio-economic consequences for endemic communities are as devastating as the health burden.

Prevention and Treatment of LF

While LF cannot be cured, its symptoms can be greatly relieved, allowing affected individuals to be productive members of the community, and the disease itself can be easily prevented, saving future generations from pain, suffering and economic loss. Prevention is achievable through simple treatment of infected communities with safe and effective tablets of two anti-parasitic medicines given orally once a year for five years. Alternatively, in some countries, regular table



Drug distribution at a school in India (WHO)

salt can be fortified with a low dose of a single medicine for two years. The medicines kill infectious LF larvae that circulate in the blood and deprive mosquitoes of their ability to transmit the disease to others, especially uninfected children. LF programs also collaborate with malaria, dengue fever and other mosquito-borne disease programs in the use of bednets to decrease rates of infection by decreasing contact between mosquitoes and human hosts.

The Global Alliance to Eliminate Lymphatic Filariasis

In 1998, following a 1997 resolution by the World Health Assembly to eliminate LF as a public health problem by 2020 and under the leadership of the World Health Organization (WHO), the Global Program for the Elimination of Lymphatic Filariasis (Program) was established to help endemic countries mount national programs to prevent and treat LF. Joining the campaign in 1998, GlaxoSmithKline committed to donate its anti-parasitic medicine, albendazole, globally. That same year, Merck & Co., Inc. extended the donation of its anti-filarial medicine, Mectizan® (ivermectin), already pledged for countries with river blindness, to countries in Africa where LF and river blindness coexist. Supplying these medicines “for as long as needed” represents the largest long-term donation ever to a global health initiative. Both companies also are providing expertise and funding, in recognition that medicines alone are not enough to ensure success.

These initial partners – the endemic countries, WHO, GlaxoSmithKline, and Merck & Co., Inc. – soon were joined by almost 40 others to form the Global Alliance to Eliminate Lymphatic Filariasis. Partners include donors, international agencies, academic institutions and non-governmental organizations. The purpose of the Alliance is to support the global Program by creating awareness, securing resources and providing a representative governance structure.

Success to Date

Since 2000, nearly half of the approximately 80 endemic countries have established active programs, with impressive overall and country-specific results:

- The number of people treated annually has risen from 25 million (12 countries) in 2000, to 46 million (22 countries) in 2001, to over 250 million (39 countries) in 2004.

- The program is extremely cost-effective. People can be treated for less than a dollar, and in some instances pennies, each. Sri Lanka treated 9.8 million people – the full population of endemic areas of the country – in 2002 for US \$153,069, or less than two cents per person.
- Community volunteers, many of whom were initially trained through other programs, such as polio, are critical to the success of the LF program, especially in Africa. In the first annual mass drug distribution in Zanzibar in 2001, over 4000 community workers reached 76% of the 800,000 people at risk of LF in a well-planned, single-day, door-to-door campaign.
- Increasingly, LF programs are seeking opportunities to integrate treatment activities with other disease programs. For instance, two states in Nigeria are currently distributing drugs to treat river blindness and schistosomiasis concurrently with LF.
- Monitoring and evaluation has shown countries completing three or four rounds of annual treatments not only are recording dramatic declines in prevalence and incidence, but also are seeing promising new evidence that people already infected with LF have markedly reduced frequency of acute fevers as a result of the preventive treatment.

What is Needed Now?

The current momentum and success must be expanded to reach the 1 billion poor people living in areas where LF is an impediment to their health, productivity and well being.

- Countries that have begun treatments have to scale up to reach the full population at risk.
- Other countries have to initiate national programs.
- All countries have to implement community-based efforts to reduce the disability of those already infected.

It is a tall order but feasible, cost effective and with multiple benefits, as shown by experience.



Haitian woman washing her leg (WHO)

In the early 1950s, China targeted five diseases as a way of improving agricultural productivity. LF was one of them, and even lacking today's improved tools, the country succeeded in eliminating the disease. A cost-benefit analysis in one province found that 1 Yuan spent on filariasis control produced 5.7 Yuan in benefits. Africa and other highly endemic regions stand to reap a similar rate of return. Beyond this economic rationale, however, there is a compelling human imperative to eliminate the pain, suffering and stigma caused by LF and, indeed, to ensure that children, families and communities everywhere enjoy "a future free of LF".

The communities are ready. The tools are available.
More partners and support will make the vision a reality.