

Triple Drug Therapy (IDA) for Lymphatic Filariasis

Background

Lymphatic filariasis (LF) is a mosquito-borne disease that damages the lymphatic system, leading to extreme swelling of the legs, arms or scrotum.

The burden as of 2017	67 million people infected
	856 million people at risk

LF is combated through preventive chemotherapy: giving at-risk populations cheap, effective drugs that keep the disease from taking hold. The drugs are donated by pharmaceutical companies: GSK, Eisai and Merck.

Significant progress has been made against LF in recent years. From 2000 to 2017:

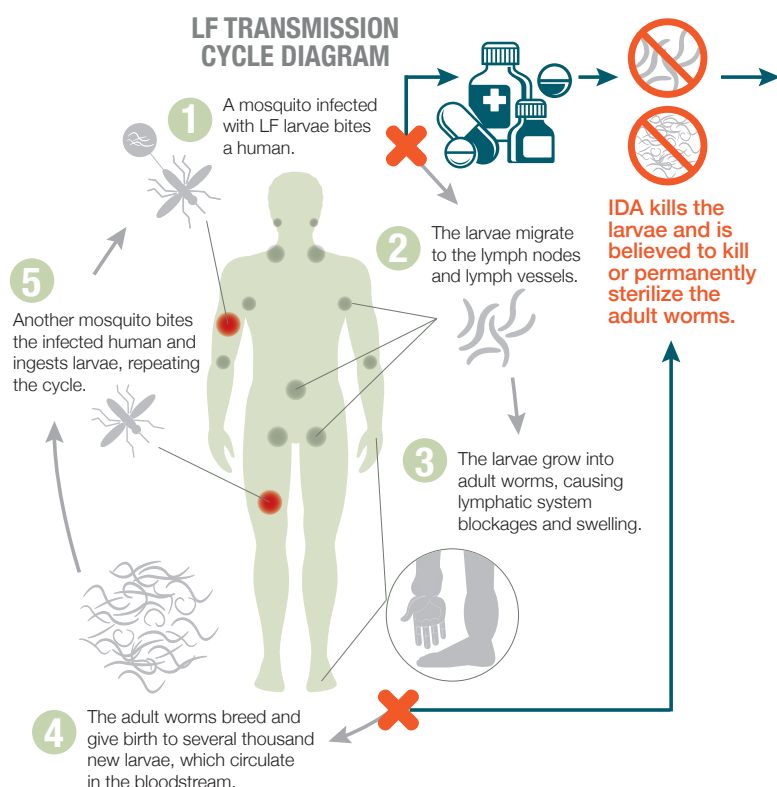
- 6.7 billion treatments were delivered
- 10 countries eliminated the disease
- The number of people infected fell from 120 million to 67 million
- The number of people at risk fell from 1.4 billion to 856 million

But there's a problem: if you're infected, current LF treatments only kill the juvenile worms that cause symptoms and enable transmission, while being unable to kill the adult worms. This means we need to reach infected people every year until the adult worm dies on its own, which can take 5-7 years.



The Breakthrough: IDA

A new treatment is poised to **rapidly shorten the time it takes to clear LF parasites from the bloodstream**, providing faster relief from LF for millions of people around the world.



Clinical trials added ivermectin to the previously recommended combination of diethylcarbamazine citrate (DEC) and albendazole, creating a triple-drug therapy known as IDA.



In clinical trials:

- **97% of people given IDA had no larvae after one year**, compared to 34% of people given previous treatments
- IDA is believed to have **killed or permanently sterilized adult worms**
- IDA had the **same risk of side effects compared** to existing recommendations

Limitation: IDA should not be used in places with onchocerciasis (river blindness) or loiasis (eye worm) due to risk of side effects in people co-infected with those diseases. WHO has existing recommendations to safely treat LF in these settings.

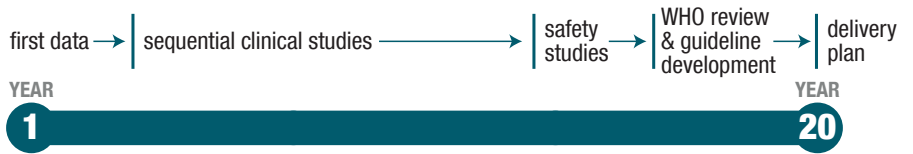
An Accelerated Process Through Partnership

WHO has recommended annual distribution of IDA in select settings. Though research is ongoing, IDA is expected to significantly reduce the duration of treatment and help countries reach elimination targets faster.

Following WHO's recommendation, **Merck** announced the **expansion of its ivermectin donation program** to treat up to an additional 100 million people for LF annually through 2025.

Thanks to unprecedented planning and collaboration, NTD partners accelerated IDA from concept to WHO-approved treatment in just over two years, a process that normally takes two decades.

TRADITIONAL APPROVAL PROCESS



IDA APPROVAL PROCESS



The Impact

IDA is expected to **dramatically accelerate the path to LF elimination** at a relatively low cost.



514 million people across 24 countries will potentially benefit – including tens of millions of people infected with LF, and the hundreds of millions more at risk.



Up to 314 million fewer treatments will be needed for LF by reducing the number of required treatment rounds.



Elimination could be achieved by 2022 in eligible communities, compared to 2030 under current treatment options.



IDA could save **US\$160 million in program savings alone**, in addition to the social and economic benefits of disease elimination.

Neglected Tropical Diseases

Neglected tropical diseases, or NTDs, are a group of debilitating infectious diseases that hold back over 1 billion of the world's poorest communities from reaching their full potential. They disable, disfigure and sometimes kill - keeping kids out of school, adults out of work and trapping communities in endless cycles of poverty.

Thanks to a diverse group of NGOs and private and public partners, **fewer people are suffering from these diseases than ever before**, and many countries are eliminating them. In 2016, over 1 billion people received NTD treatments, and the number of people at risk for NTDs fell by 20 percent between 2010 and 2015.

Continued commitment from donor and endemic country governments, pharmaceutical companies, NGOs and frontline health workers is essential to ensuring even the hardest to reach communities are freed from LF and other NTDs.

