

Some things you may not know about Neglected Tropical Diseases

[Malaria Consortium's main focus on neglected tropical diseases \(NTDs\)](#) lies in the delivery of safe and effective drugs to control seven diseases: onchocerciasis, lymphatic filariasis, schistosomiasis, trachoma and soil-transmitted helminths (hookworm, ascariasis and trichuriasis). We have been conducting situational analyses and reviewing possible interventions to control these NTDs in South Sudan, Ethiopia, Uganda, Mozambique and Nigeria and have recently broadened our NTD scope to include dengue in Cambodia.

But as the name suggests, NTDs are not widely known and knowledge often extends as far as a basic understanding of one or two diseases. Below is a list of the NTDs that Malaria Consortium works on and some interesting facts for each.

Soil-transmitted helminths (intestinal worms): An umbrella term to cover infection from three types of intestinal worm (hookworm, ascariasis and trichuriasis). The infection is transmitted through exposure to worm eggs in soil, either by ingesting them from unclean hands or by penetration through the skin when walking bare foot on contaminated soil. The worms live in the digestive tract of the host and lead to anaemia, stunted growth, poor nutrition, and can negatively impact the education of school children. Safe, cheap oral drugs can effectively clear STH infection, but re-infection after treatment is common.

Did you know: These three soil-transmitted helminth diseases combined are the most common of the NTDs, affecting over two billion people?

Lymphatic filariasis (elephantiasis): A disease which is spread to humans through mosquito bites. At present there are one billion people at risk worldwide with 120 million known to be infected, mostly in tropical regions. Treatment with a combination of two drugs can prevent transmission, while mosquito control such as the use of insecticide treated nets and indoor spraying can also prevent new infections. Its visible manifestations occur later in life, causing temporary or permanent disability.

Did you know: Elephantiasis is one of the leading causes of disability worldwide?

Schistosomiasis (bilharzia): A disease caused by parasites released from snails in fresh water. It can cause life-threatening urinary or liver damage and cancers. Currently, 76 million children need annual treatment with the drug praziquantel to kill the parasite that causes schistosomiasis. One solution is to improve sanitation to prevent human excreta entering water, thereby breaking the life cycle of the parasite.

Did you know: The Egyptian Aswan Dam project was responsible for a seven-fold increase in schistosomiasis cases in Egypt in the 1960s?

Trachoma: An infection that leads to scarring of the inner eyelid, causing the eyelashes to turn inwards and scratch the surface of the eye (trichiasis). This makes blinking extremely painful and eventually causes blindness. More than 40 million people across the globe are currently at risk. Antibiotics can kill the infection causing trachoma and prevent trichiasis from developing, while eyelid surgery can assist people already suffering trichiasis. Facial flies are thought to transfer the infection from person to person. Simple interventions such as washing children's faces daily may reduce the risk of trachoma.

Did you know: Trichiasis sufferers often pull out their eyelashes to relieve the pain but the relief is short lived as eyelashes often grow back stronger and rougher than before?

River blindness (onchocerciasis): A disease caused through an infection by a parasitic worm and transmitted to humans by the black fly. About 500,000 people are thought to be blind as a result of this disease, mostly in sub-Saharan Africa. Treatment and prevention are currently managed through mass drug distributions twice a year in affected areas. Before this became the primary control tool, insecticide spraying of fast-flowing rivers to target the black fly breeding sites was used to eliminate the black fly in many parts of west Africa.

Did you know: In certain West African communities river blindness affects 50 percent of males over the age of 40?

Dengue: A mosquito-borne infection found in tropical and sub-tropical regions around the world, dengue has become a major international public health concern. The infection causes flu-like symptoms and occasionally develops into a potentially lethal complication called severe dengue. The global incidence of dengue has grown dramatically in recent decades, with more than 2.5 billion people – over 35 percent of the world's population – now at risk from the disease. WHO currently estimates there may be 50–100 million dengue infections every year. There is no specific treatment for dengue or severe dengue, but early detection and access to proper medical care lowers fatality rates below 1 percent.

Did you know: At present, the only method to control or prevent the transmission of dengue virus is to combat the mosquitoes carrying the disease?

To read more about Malaria Consortium's work to control and eliminate these NTDs then please read our NTD brochure [here](#).