



**Neglected Tropical Diseases and the Millennium Development Goals**

The seven most common neglected tropical diseases (NTDs)

- 1 Lymphatic filariasis (elephantiasis)
- 2 Onchocerciasis (river blindness)
- 3 Trachoma
- 4 Schistosomiasis (snail fever)
- 5 Trichuriasis (whipworm)
- 6 Ascariasis (roundworm)
- 7 Hookworm

infect more than one billion people around the world, most of whom live on less than \$1.25 per day.

Eliminating or controlling these diseases will have a significant impact on the success of the eight Millennium Development Goals (MDGs), a group of goals agreed to by 189 United Nations members in 2000 to help lift the world's poorest countries out of extreme poverty by the year 2015.

**Eradicate Extreme Poverty and Hunger (MDG 1)**



**NTD infections can lead to malnutrition.** Intestinal worms and schistosomiasis

impact more than half a billion people and can cause anemia and malnourishment, in addition to other cognitive and physical disabilities. Parasites like hookworm and ascariasis consume key nutrients from the food that a person needs to be healthy, minimizing the impact of food aid in cases of extreme hunger.

Disabilities and disfigurement caused by NTDs trap people in a cycle of poverty. NTDs keep children out of school and prevent parents from working and caring for their families. The result is that generations become trapped in a cycle of poverty and disease. Treating hookworm alone in children can result in a 43 percent increase in future wage earnings. In India, treating lymphatic filariasis would increase the GNP by an estimated \$1.5 billion annually.

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## Achieve universal primary education (MDG 2)



**NTDs prevent children from attending and performing well in school.** More than

half a billion children are chronically ill from one or several NTDs and many are not able to regularly attend school as a result. Likewise, children who have to stay home to care for parents who are disabled by NTDs often miss the opportunity to receive an education. Treating intestinal

worm infections through mass drug administration has been shown to decrease school absenteeism by 25 percent.

Additionally, severe malnutrition and anemia caused by NTD infection have been shown to lead to significant delays in cognitive development. Children with NTDs or with a history of NTDs are often robbed of the nutrients necessary to grow and learn to their fullest potential.

## Promote Gender Equality and Empower Women (MDG 3)



**NTDs are particularly devastating to women and girls.** In sub-Saharan Africa,

female genital schistosomiasis (FGS) causes severe pain, bleeding and lesions in more than 16 million women and girls. The long-term socio-economic impact that NTDs impose on women and girls is

severe. The scarring and disfigurement from NTDS such as FGS and elephantiasis can prevent young women from marrying or can be grounds for spousal abandonment. And though NTDs are not spread through human contact, a mother affected by these diseases might be prevented from even holding or kissing her child.

## Reduce Childhood Mortality (MDG 4)



**Children with NTDs have an increased risk of contracting other diseases that can lead to death.** NTDs have long-term

adverse consequences on child health and development. Malnourishment and anemia, two common side effects of NTDs, have

been shown to reduce the physical and intellectual growth of children. Chronic iron deficiency anemia as a result of NTDs weakens the immune system, which can cause increased rates of infection by diseases with high mortality rates, such as malaria and tuberculosis.

## Improve Maternal Health (MDG 5)



**The effects of NTDs, including anemia, can result in increased rates of maternal morbidity and mortality.**

NTDs such as hookworm infection and schistosomiasis are leading causes of anemia, a condition that has serious

implications for pregnant women and their newborns. Anemia can cause low birth weight, infection, miscarriage and even the death of the mother. Currently, 20 percent of maternal deaths in Africa can be attributed to anemia.

## Combat HIV/AIDS, malaria and other diseases (MDG 6)



**Individuals with NTDs have an increased risk of contracting other diseases, including HIV/AIDS.**

NTDs burden the immune system and make it difficult for the body to fight off other diseases. For example, women with female genital schistosomiasis (FGS) have an increased risk of contracting HIV. A study from a rural Zimbabwean community revealed that women ages 20

to 49 with FGS had a three-fold risk of having HIV relative to women without FGS.

Combining the treatment and prevention of multiple diseases—including NTDs—is a cost-effective way to combat them all. Coordinating and integrating programs to control multiple diseases together improves the success of these programs. For instance, lymphatic filariasis and malaria are both transmitted by mosquitoes, so distribution of bed nets leads to a decline in both diseases.