

General Statement

- The NTDs are responsible for an estimated 56.6 million DALYs annually, more than malaria or tuberculosis and almost as much as HIV/AIDS. The major component of these DALY losses is the impact of the soil-transmitted helminth infections and schistosomiasis on maternal child health (approximately 43 million DALYs)

Impact on Child Health

- The NTDs include the three major soil-transmitted helminthiases (ascariasis, trichuriasis, and hookworm infection) and schistosomiasis. These represent the most common infections of children worldwide. An estimated 400 million school-age children have these parasitic worm infections, with the highest rates of infection in sub-Saharan Africa, Southeast Asia, and the Indian subcontinent.
- Together the soil-transmitted helminthiases and schistosomiasis are the leading cause of physical growth retardation in children and also neuropsychiatric disturbances, such as cognition and memory loss.
- Periodic treatment for these NTDs represents a major child survival intervention.
- The soil-transmitted helminthiases and schistosomiasis are also important educational problems resulting in a 25% decrease in school attendance, as well as a 40% reduction in future wage-earning capacity.
- Other important childhood NTDs include Buruli ulcer – a major cause of disfigurement in West Africa, and visceral leishmaniasis - a systemic disease causing hepatosplenomegaly and pancytopenia, particularly in India (Bihar State) and neighboring Nepal, Sudan, and Brazil.

Impact on Maternal Health

- Chronic hookworm infection and schistosomiasis are major causes of anemia, which are additive to the anemia in pregnancy caused by malaria. In so doing, the NTDs are significant causes of poor outcomes in pregnancy resulting in low birthweight and high maternal mortality.
- An estimated 44 million pregnant women harbor hookworm infections. Deworming has been shown to represent a major strategy for improving pregnancy outcome and reducing maternal morbidity and mortality.
- Urogenital schistosomiasis caused by *Schistosoma haematobium* is a major risk factor for HIV transmission in sub-Saharan Africa.
- Soil-transmitted helminth infections and schistosomiasis increase rates of HIV vertical transmission.

