

Table 2. Major Characteristics of the Most Prevalent Neglected Tropical Diseases.

Disease	Vulnerable Populations	Clinical Manifestations and Associated Disabilities	Primary Interventions	Weaknesses of Current Approaches
Ascariasis	School-age children	Malnutrition, growth and cognitive delays	Single-dose albendazole or mebendazole (1–3 times/yr)	Limited access to essential medicines
Trichuriasis	School-age children	Inflammatory bowel disease, growth and cognitive delays	Single-dose albendazole or mebendazole (1–3 times/yr)	Limited access to essential medicines
Hookworm infection	School-age children, women of reproductive age	Anemia, malnutrition, growth and cognitive delays, poor pregnancy outcome	Single-dose albendazole or mebendazole (1–3 times/yr)	Limited access to essential medicines, low efficacy (mebendazole), rapid reinfection, drug resistance
Schistosomiasis	School-age children, women of reproductive age	Hematuria and urogenital disease, intestinal and liver fibrosis, growth and cognitive delays	Single-dose praziquantel	Limited access to essential medicines, potential drug resistance
Lymphatic filariasis	Adolescents, adults	Adenolymphangitis, lymphedema, hydrocele	Single-dose ivermectin or diethylcarbamazine (plus albendazole)	Limited access to essential medicines
Trachoma	Children, adults (especially women)	Trachomatous folliculitis and inflammation, trichiasis, blindness	Surgery, azithromycin, face washing, environmental control	Limited access to essential medicines and public health interventions
Onchocerciasis	Adults	Onchocerca, skin disease, blindness	Single-dose ivermectin	Limited access to essential medicines, potential drug resistance
Leishmaniasis	Children, adults	Cutaneous and mucocutaneous disease, kala-azar	Case detection and management, antimonials, amphotericin B, pentamidine, miltefosine, vector control	Limited access to essential medicines, drug toxicity, drug resistance
Chagas' disease	Children, adults	Cardiomyopathy, megacolon, megaesophagus	Case detection and management, nifurtimox, benznidazole, vector control	Inadequate vector coverage, limited access to essential medicines, poor efficacy
Leprosy	Adults	Lepromatous leprosy, tuberculoid leprosy	Multidrug therapy: rifampicin, clofazimine, dapsone	Limited access to essential medicines
Human African trypanosomiasis	All ages	Sleeping sickness	Case detection and management, pentamidine, suramin, melarsoprol, eflornithine, vector control	Inadequate surveillance, limited access to essential medicines, drug toxicity
Dracunculiasis	All ages	Disfiguring ulcer, secondary bacterial infection	Provisions for safe water, water filtration, larvicides for copepod control, case containment and surveillance	Limited access to public health control measures in Ghana and Sudan
Buruli ulcer	Children	Disfiguring ulcer	Antibiotics, débridement and skin grafting	No preventive methods available, limited access to essential surgical interventions

Table 3. General Guidelines for Preventive Chemotherapy for the Seven Most Prevalent Neglected Tropical Diseases.*

Disease	Drug and Dosage	Threshold for Implementation	Eligible Population	Frequency of Administration
Lymphatic filariasis (in areas where onchocerciasis is also endemic)	Ivermectin, according to person's height (with use of a tablet pole for children), plus albendazole, 400 mg	≥1% prevalence	Entire at-risk population except pregnant women, lactating women in the first week after birth, and children shorter than 90 cm (15 kg)	Once/yr
Lymphatic filariasis (in areas where onchocerciasis is not also endemic)	Diethylcarbamazine, 6 mg/kg of body weight (with age as criterion for dose), plus albendazole, 400 mg	≥1% prevalence	Entire at-risk population except pregnant women and children younger than 2 yr	Once/yr
Onchocerciasis	Ivermectin, according to person's height (with use of a tablet pole for children)	≥40% prevalence or ≥20% palpable nodules	Entire at-risk population except pregnant women, lactating women in the first week after birth, and children shorter than 90 cm (15 kg)	Once/yr
Schistosomiasis	Praziquantel, 40 mg/kg (with use of a tablet pole for children)	Presence of infection	School-age children and special-risk populations; exclude children younger than 4 yr	<10% community prevalence, twice during primary school; 10–50% prevalence, once every 2 yr; >50% prevalence, every yr
Soil-transmitted helminth infections (ascariasis, hookworm infection, and trichuriasis)	Albendazole, 400 mg, or mebendazole, 500 mg	≥20% infection; once/yr for <50%, twice/yr for >50%	Preschool-age and school-age children, women of childbearing age, and adults at high risk; exclude children in first year of life and pregnant women in first trimester	Once or twice/yr depending on community prevalence (once/yr for low-risk communities with 20–50% prevalence; twice/yr for high-risk communities with ≥50% prevalence)
Trachoma	Azithromycin, 20 mg/kg (with use of a tablet pole for children), to a maximum dose of 1 g in adults	Active trachoma prevalence >5% in children 1–9 yr of age at district level	Entire at-risk population except children ≤6 mo of age	Once/yr

* Data are from the World Health Organization.⁴⁴ A tablet pole shows the correct number of tablets according to a child's height as measured on the pole.