

## At a glance: the core



## neglected tropical diseases (NTDs)

	Trachoma	Onchocerciasis	Soil-transmitted helminths	Lymphatic filariasis	Schistosomiasis
	Trachomatous trichiasis	A woman blinded by onchocerciasis	Adult female Ascaris lumbricoides worm	Elephantiasis due to lymphatic filariasis	Dipstick testing to detect haematuria. The sample on the left is negative for haematuria – the other two are both positive
Where	<ul> <li>Africa</li> <li>Latin America</li> <li>Yemen</li> <li>China</li> <li>India</li> <li>Australia</li> <li>South-East Asia</li> <li>Pacific Islands</li> <li>(see www.trachomaatlas.org)</li> </ul>	<ul><li>Africa</li><li>Latin America</li><li>Yemen</li></ul>	Worldwide (see www.thiswormyworld.org)	<ul> <li>Africa,</li> <li>Asia</li> <li>Latin America</li> <li>Pacific Islands</li> <li>(see www.thiswormyworld.org)</li> </ul>	<ul> <li>Africa</li> <li>Asia</li> <li>Latin America</li> <li>(see www.thiswormyworld.org)</li> </ul>
How	<ul> <li>Discharge from infected eyes spreads via fingers, fomites and eye-seeking flies (especially Musca sorbens)</li> </ul>	<ul> <li>Acquired by the bite of an infected blackfly (Simulium sp.)</li> </ul>	Eggs are passed out in faeces and then swallowed by another host (Ascaris, Trichuris) or develop into infective larvae and penetrate intact skin (hookworm)	Acquired by the bite of infected mosquitoes	<ul> <li>Acquired by contact with standing fresh water (e.g. lakes) in which there are infected snails</li> </ul>
Who	<ul> <li>Pre-school-age children have the highest prevalence of active trachoma. The prevalence of blindness from trachoma increases with age</li> </ul>	People living near rivers where blackflies breed	<ul> <li>People living in communities with poor access to water and sanitation</li> <li>People who walk barefoot are at risk of hookworm infection</li> </ul>	Children aquire the infection, but sequelae tend to occur in adults	Children and adults who play, work or undertake chores on the edge of lakes
What	<ul> <li>Inflammation of the conjunctiva (active trachoma)</li> <li>Conjunctival scarring</li> <li>Trichiasis</li> <li>Corneal opacification</li> </ul>	<ul> <li>Nodules under the skin</li> <li>Pruritus</li> <li>Thickening of skin or loss of skin pigment</li> <li>Punctate keratitis</li> <li>Sclerosing keratitis</li> <li>Uveitis</li> <li>Chorioretinitis</li> <li>Optic atrophy</li> </ul>	<ul> <li>Often asymptomatic</li> <li>May contribute to anaemia leading to fatigue and lethargy</li> </ul>	<ul> <li>Often asymptomatic</li> <li>Enlargement of the limbs, genitals or breasts, with secondary skin changes</li> </ul>	<ul> <li>Acute infection:         fever, itchy rash</li> <li>Chronic infection:         often asymptomatic;         haematuria, renal         failure, bladder cancer         (urinary schistosomiasis);         liver failure (intestinal         schistosomiasis)</li> </ul>
Test	Clinical diagnosis	<ul><li>Skin snip</li><li>Slitlamp examination of eye</li></ul>	Stool microscopy for eggs	<ul> <li>Examination of night blood smear for microfilariae</li> </ul>	Urine/stool microscopy for eggs
Treat	<ul> <li>Individual:</li> <li>Tetracycline eye ointment twice daily for 6 weeks, or single dose azithromycin, 20mg/kg (maximum 1g), for active trachoma</li> <li>Surgery for trichiasis</li> </ul>	Individual: • Ivermectin 150µg/kg once a month for 3 months	Individual: • Single dose albendazole 400mg	<ul> <li>Individual:</li> <li>Albendazole 400mg for 21 days</li> <li>Washing of swollen parts to reduce risk of secondary infection and progression of elephantiasis</li> </ul>	Individual:  • Two doses of praziquantel 20mg/kg taken 6 hours apart after food
	Population: • SAFE strategy	Population:  • Mass distribution of ivermectin	<ul> <li>Population:</li> <li>Mass distribution of albendazole or mebendazole.</li> <li>Improved access to safe methods for disposal of human faeces</li> </ul>	Population:  • Mass distribution of DEC+albendazole, or (if onchocerciasis co-endemic) ivermectin+albendazole	<ul> <li>Population:</li> <li>Mass distribution of praziquantel</li> <li>Improved access to safe methods for disposal of human faeces</li> <li>Education</li> </ul>

Education