and a papular eruption in areas to which the organism migrates

children playing in contaminated soil expose many skin surfaces

Diagnosis established by presence of hookworm eggs in stool (humans are the only host of hookworms)

Treat with albendazole, mebendazole, and pyrantel pamoate

Strongyloidiasis—Strongyloides stercoralis (Threadworm)

Light infection: Asymptomatic

Heavy infection: Respiratory signs and symptoms; abdominal pain, distention; nausea and vomiting; diarrhea (large, pale stools, often with mucus)

Larva migration manifests as pruritic skin lesions in the perianal area, buttocks, and upper thighs, creating serpiginous, erythematous tracks called *larva currens* (American Academy of Pediatrics, 2015)

Life threatening in children with weakened immunologic defenses

Transmission is same as for hookworm except autoinfection common; humans are hosts, but cats, dogs, and other animals may also be hosts for the threadworm

Older children and adults affected more often than young children

Severe infections may lead to severe nutritional deficiency

Diagnosis: Often difficult; several stool specimens may be required

Treat with ivermectin (preferred); *or* thiabendazole and albendazole (both less effective than ivermectin)

Visceral Larva Migrans-Toxocara canis (Dogs) (Roundworm)

Intestinal Toxocariasis—Toxocara cati (Cats) (Roundworm)

Depends on reactivity of infected individual May be asymptomatic except for eosinophilia or pulmonary wheezing

Specific diagnosis difficult

Visceral toxocariasis: Fever, leukocytosis, eosinophilia, hepatomegaly, and hypogammaglobulinemia, malaise, anemia, cough (American Academy of Pediatrics, 2015)

Ocular invasion may occur

Rarely pneumonia, myocarditis, encephalitis

Transmitted by direct contamination of hands from contact with soil or contaminated objects; less commonly by direct contact with dog or cat

More common in children or adults with pica

Keep dogs and cats away from areas where children play; sandboxes especially important transmission areas; more common in hot, humid regions

Hand washing is imperative in children playing in soil or around domestic animals, such as cats and dogs

Periodic deworming of diagnosed dogs and cats

Control of dog and cat population Diagnosis: Hypergammaglobulinemia and hypereosinophilia; increased titers of anti-A or anti-B blood group antigens; liver biopsy in some cases

Treat with albendazole; specific symptoms may require additional treatment

Trichuriasis—Trichuris trichiura (Whipworm or Human Whipworm)

Light infections: Asymptomatic

Heavy infections: Abdominal pain and distention, diarrhea; failure to thrive, impaired cognitive development; stools may have mucus, water, and blood Transmitted from contaminated soil, fruit, vegetables, toys, and other objects Most frequent in warm, moist climates Occurs most often in undernourished children living in unsanitary conditions where human feces are not disposed of

properly
Diagnosis by microscopic examination of
stool specimen

Treat with albendazole, mebendazole, or