Nematoda - Intestinal Roundworms - Phylum Nemathelminthes - Class Nematoda								
	Common Name	Adult Worm	Microscopic	Endemic areas	Transmission	Infection	Symptoms	Diagnosis
Enterobius vermicularis	pinworm - seatworm	colon	thick walled, colorless shell - flattened on one side - coiled larva - 55µm x 25µm	worldwide distribution	ingestion - fecal/oral - autoreinfection (nocturnal migration of gravid female)	most common helminth infection in US	pruritus ani - perianal itching, abdominal pain, vulva irritation	cellopane tape prep of anal area - eggs/worms (a.m)
Trichuris trichiura	whipworm	colon (embed in mucosa)	barrel shaped egg - hyaline plug at each end - thick yellow/brown shell due to bile - underdeveloped, unicellular embryo - 50µm x 25µm	warm countries & areas of poor sanitation	ingestion of eggs	common intestinal helminth in US (children & mentally handicap) - Whipworm disease; assoc. w/pica (eating dirt); coinf. w/Ascaris	heavy worm burden- bloody diarrhea, abdominal pain, weight loss, fatigue, increased peristalsis, rectal prolapse; kids- mimics ulcerative colitis; adults- mimics inflamm. Bowel disease	eggs in feces
Ascaris lumbricoides	giant roundworm	small intestine - cecum	eggs- fertilized or non-fertilized	warm countries & areas of poor sanitation - Appalachian Mtn. region	ingestion of eggs; 250,000 eggs/day - eggs remain infective in soil or water for years	2nd most common in US - most common inf. Worldwide - Ascaris disease - liver lung migration	tissue- 30-50% eosinophilia, pneumonia, cough; intestinal- asymp or ab pain w/nausea & diarrhea; other- hepatitis, pancreatitis, cholecystitis	eggs or worms in feces
Necator americanus	New World hookworm	small intestine	species cannot be differentiated - thin, smooth, colorless shell - 2-8 cell stage of cleavage - 50µm x 30µm	worldwide - egrarian areas - poor sanitation	direct skin penetration - filariform larvae in contaminated soil	pica - "ground itch" at penetration site	lung - pneumonia, cough, bloody sputum; intestine- ab pain, nausea, diarrhea, iron deficiency anemia, high eosinophilia - cutaneous larval migrans	eggs in feces or worms in biopsies - rhebditiform larvae in stool
Ancylostoma duodenale	Old World hookworm							
Strongyloides stercoralis	threadworm	parthrogenic female - small intestine	rhabditiform larvae- short buccal cavity, hourglass shaped esophagus, genital primodium, anus - 275um x 16um	worldwide - tropics & subtropics	only female - autoreinfection - self fertilization; filariform larvae penetrate skin	immunocomp. w/defective T-cell function	lung- bronchial verminous pneumonia; intestine- asymp or ab pain, eosinophilia, anemia, weight loss, diarrhea	rhabditiform larvae or eggs in feces or duodenal dreinage fluid

Nematoda - Pathogenic Tissue Roundworms - Phylum Nemathelminthes - Class Nematoda								
	Common Name	Adult Worm	Microscopic	Endemic areas	Transmission	Infection	Symptoms	Diagnosis
Trichinella spiralis	trichina worm	intestine	larvae encysts in muscle - "nurse cell" - inflamm. infiltrates, granuloma forms, calcification w/time	worldwide (meat eating populations) - low prevelance in US/rare in tropics	ingestion of undercooked meat - striated muscle containing encysted larvae (pork, deer, walrus, bear etc)	Trichinellosis	peripheral blood eosinophilie; intestinel- headache, intestine edem & inflamm. Diarrhea; migration- high fever, blurred vision, periorbital edema, pleural pains, eosiniphilia; musculer- acute local inflamm. With edema & pain of	ID of encysted larvae in biopsied muscle; ELISA
Dracunculus medinensis	guinea worm	intestine	largest adult nematode - females up to 1 meter, male up to 40 mm (rare)	middle east, India, Pakistan & Africa	ingestion of contaminated drinking water (Cyclops- copepods w/larvae)	no immunity to reinfection; female worm migrates to subcutaneous tissue - blister forms - release larvae via ruptured blister (cold water induces releaseof larvae)	allergic rxn, painful blisters usu. On feet or legs, secondary bacterial infections	visual observation of skin blisters - remove worm by wrapping it around a stick (could take days to months)
Toxocara canis	dog roundworm	larvae released in intestine - migrate via circulatory system to other organs - development is arrested		worldwide	visceral larval migrans- ingestion of infective stage larvae in developed eggs from soil - exposure to infected animals; Ancylostoma spp.- via skin penetration by	zoonatic- visceral (cutaneous) larval migrans- thin, red, papular lines of "creeping eruption", systemic toxocariasis, ocular toxocariasis; pica in kids	eosinophilie, elevated isohemagglutinins, hepatomegaly, pulmonary inflamm. W/cough & fever, often seizures, encystment of larvae in eye	eggs or worms in feces
Toxocara cati	cat roundworm							
Ancylostoma braziliense	dog hookworm					visceral larval		

Ancylostoma caninum	dog hookworm				filariform larvae	migrans		