

Equine intestinal threadworm

Description: Threadworms are hair-like and 8 to 9 millimeters long.

Predilection site: Small intestine.

Geographic distribution: Common throughout the US.

Life cycle: *Strongyloides westeri* may pass through both a parasitic and a free-living stage. In the parasitic phase, the organism reproduces asexually. In the free-living stage (which may or may not occur), the threadworm reproduces sexually. In the parasitic stage, female adults lay eggs in the intestines, and the eggs develop by parthenogenesis. Embryonated eggs are passed in feces. On pasture, the eggs hatch quickly and molt to the infective L₃ stage in 24 to 48 hours; these infect animals by skin penetration or ingestion.

Strongyloides westeri larvae may be passed in colostrum. In fact, nursing is one of the most important means of transmission of threadworm infections to young foals.

Significance: Heavy threadworm infections occasionally can be important in foals. Control measures are important with older animals, primarily to protect young horses.

Clinical effects on host: Migration of larval *Strongyloides* through the lungs can cause severe hemorrhage and respiratory distress. Skin penetration may result in irritation and dermatitis. If adult worms are numerous, erosion of the intestinal mucosa causes sloughing and interference with digestion. A few episodes of infection lead to strong immunity to this species by the time a foal is 4 to 6 months old. Foals with heavy worm burdens suffer from acute diarrhea, weakness, and emaciation. Older animals may harbor large worm burdens without clinical manifestations.

Diagnosis: Eggs and larvae can be identified in fresh fecal samples.