

# WORM of the WEEK

## Hookworm

### *Ancylostoma duodenale* AND *Necator americanus*

#### Hookworm

The 2<sup>nd</sup> most common helminthic infection after ascariasis and the leading cause of anemia and protein malnutrition affecting 740 million people worldwide. Infections can be limited to the skin (**cutaneous larva migrans**) or involve the **small intestine** by passing through the lungs. **Larvae penetrate skin from feces and/or soil contaminated with nematode eggs**. Adult hookworms can live in the body for 1-2 years. Cutaneous infections are caused by larvae that use dogs and cats as definitive hosts.

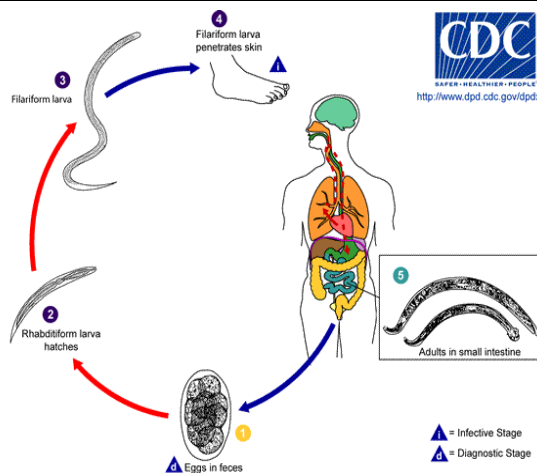
#### Symptoms

Ground itch or cutaneous larva migrans presents with a **pruritic serpiginous rash**. **Iron-deficiency anemia** is the most common symptom of intestinal infection. Cardiac complications, gastrointestinal and nutritional symptoms may also occur. Respiratory symptoms may occur during pulmonary migration of the larvae. Reinfection is common.

#### Populations/Countries Affected



Also present in the US and Australia



#### Diagnosis

Microscopic identification of eggs in feces is evidence of infection.



#### Treatment

**Albendazole, mebendazole or pyrantel pamoate** are the drugs of choice but are considered investigational in the US.

#### Prevention and Control

In 2001, the World Health Organization (WHO) adopted a resolution aimed at the “**deworming**” of 75 percent of all at-risk school-age children by 2010, the largest public health program ever attempted to date. As with the other soil-transmitted helminths, treatment of hookworm infection is coupled with **education efforts** aimed at **proper waste disposal** and sanitation management. The Human Hookworm Vaccine Initiative currently has vaccines in Phase I and II trials.

Sources:

[http://www.who.int/vaccine\\_research/diseases/soa\\_parasitic/en/index2.html](http://www.who.int/vaccine_research/diseases/soa_parasitic/en/index2.html)

<http://www.cdc.gov/ncidod/dpd/parasites/hookworm/default.htm>

**Just 50 cents campaign:**

<http://www.globalnetwork.org/just50cents>

