

WORM of the WEEK

Ascariasis *Ascaris lumbricoides*

Ascariasis

Ascaris is a roundworm that lives in the small intestine. Infection with *Ascaris* is called ascariasis. Adult female worms can grow over 12 inches in length, adult males are smaller. Ascariasis is the most common human worm infection, affecting 800 million people worldwide (about 1/8th of the world's population!)

Symptoms of *Ascaris* Infection

Ascariasis often causes malnutrition, anemia and impaired physical and cognitive growth, particularly in children. Heavy infection may cause abdominal pain and abdominal blockage. Migration of larvae through the lungs can cause coughing and trouble breathing. Ascariasis causes about 60,000 deaths worldwide per year and harms the quality of life for many more.

Populations/Countries Affected



How it is Contracted/Life Cycle

Ascaris eggs are found in human feces. After feces contaminate the soil, the eggs become infectious after a few weeks. Infection occurs when a person ingests infectious *Ascaris* eggs. Once in the small intestines, immature worms hatch from the eggs. The larvae migrate through the lungs and then to the throat where they are swallowed. Once swallowed, they reach the intestines and develop into adult worms. Adult female worms lay eggs that are then passed in feces; this cycle will take between 2-3 months.

Diagnosis

- Microscopic examination of fecal samples for eggs
- Ultrasound and radiography for intestinal and biliary obstruction.

Treatment

- Mebendazole or albendazole are currently the drugs of choice to treat adult worms.
- Treatment can cost as little as 2 cents per dose.

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. The program is currently underway and has been able to achieve some success in reducing the severity of worm infections in some areas, particularly in Africa. Education efforts aimed at prevention through proper sanitation, hand washing and food preparation techniques are also critical to reducing incidence of the disease

Sources: <http://gnntdc.sabin.org/about-ntds/factsheets>
http://www.cdc.gov/ncidod/dpd/parasites/ascaris/factsht_ascaris.htm