

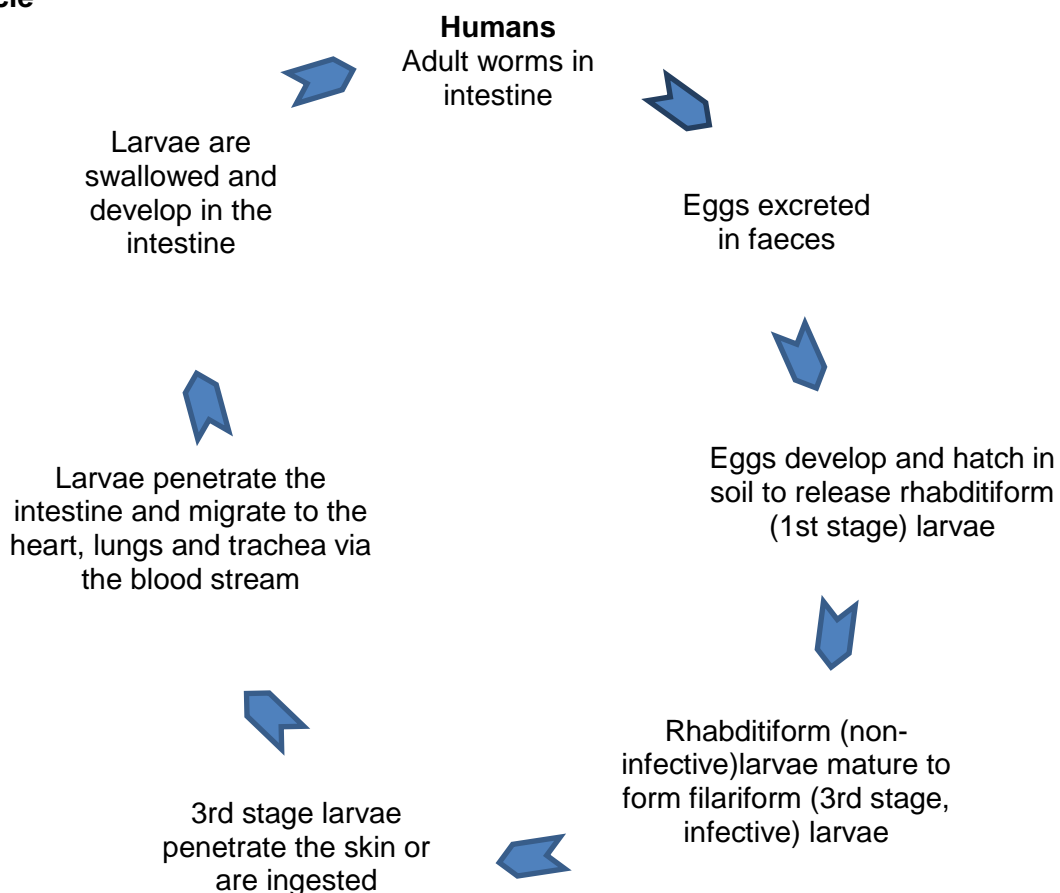
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## Hookworm species

### Introduction

Hookworms infective to man comprise of 2 species, *Necator americanus* and *Ancylostoma duodenale*. They are of cosmopolitan distribution.

### Life cycle



### Clinical Disease

Larval penetration of the skin may lead to pruritis. The adult worm in the intestine may cause intestinal necrosis and blood loss as a result of the attachment of the adult to the intestinal mucosa. Patients with acute infections may experience nausea, vomiting, abdominal pain, diarrhoea and eosinophilia. Iron deficiency anaemia may result from the blood loss. Heavy worm burden in children may have serious consequences including death

## Laboratory Diagnosis

Adults of Hookworm species may be passed out spontaneously in faeces. Hookworms infective to man comprise of 2 species, *Necator americanus* and *Anchylostoma duodenale*. Both species have similar general morphology and measure approximately 8mm. The male species has a posterior corpulate bursa which is absent from the female. The mouth of *A. duodenale* is on the dorsal surface with 2 hook like teeth on the top and 2 triangular cutting plates on the bottom. The mouth of *N. americanus* has 4 cutting plates, 2 on the ventral and 2 on the dorsal surfaces. The microscopic examination of stool deposits after concentration reveals oval, transparent ova with a smooth thin shell and measure 56 - 75µm by 36 - 40µm. They are usually passed in the 4 - 8 cell stage in faeces and may be embryonated. The ova of both species of Hookworm are similar.



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