

# Soil Transmitted Parasites

ROUNDWORMS, HOOKWORMS, WHIPWORMS



# What are they?



## ROUNDWORMS

Roundworms live in the small intestine. They can grow to over 200 mm in length. If there are a lot of them, they can obstruct the bowel.



## WHIPWORMS

Whipworms are about 40 mm in length. A heavy infection with whipworms may lead to abdominal discomfort and diarrhoea.



## HOOKWORMS

Hookworms are about 10 mm long. A heavy infection with hookworms can cause serious illnesses. Children develop malnutrition. Adults, especially pregnant women, can become seriously anaemic.

Magnified by electronic scan



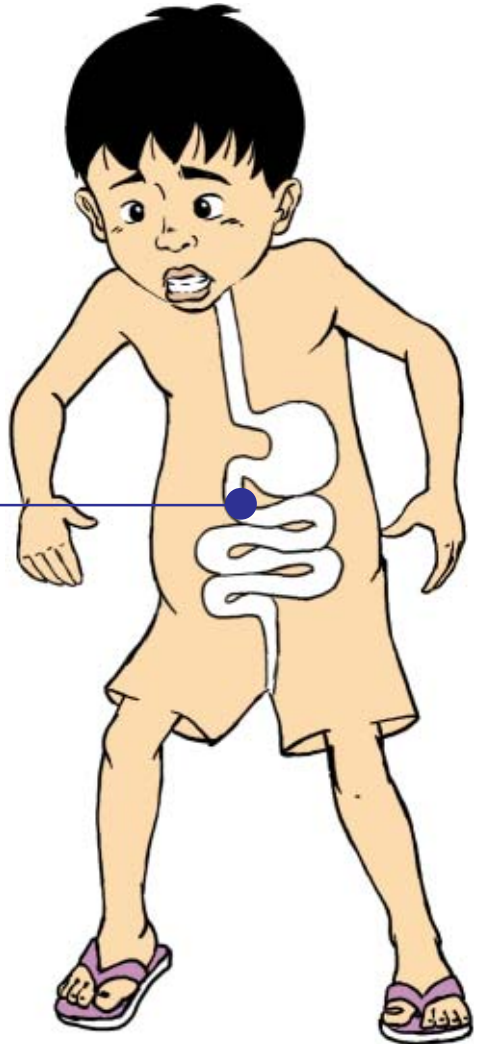
# Where do they live?

Roundworms, hookworms and whipworms live in the human intestine. That is where they grow up, but they start life outside the body.

ROUNDWORMS

HOOKWORMS

WHIPWORMS



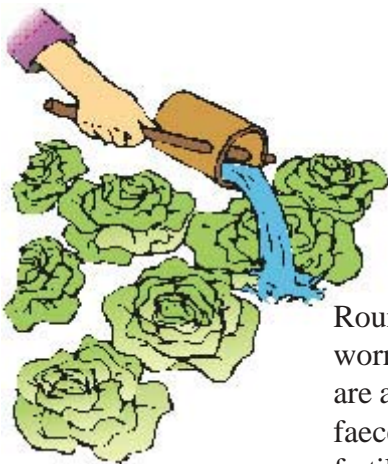
# How are roundworms and whipworms spread?



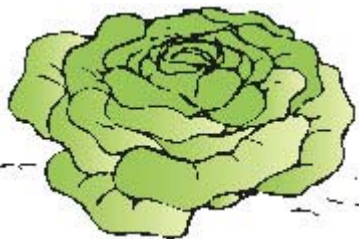
When an infected person defecates, eggs from the worms are passed in the stool.



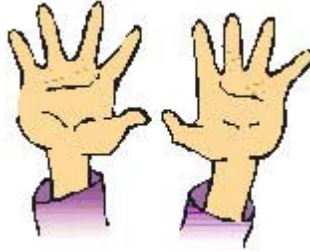
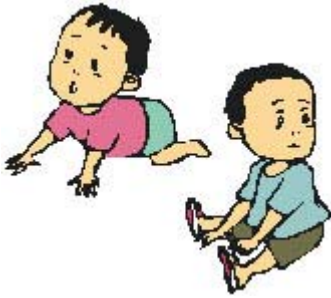
If he or she does not use a latrine but defecates outside (near bushes, in banana grove, in the garden or in a rice field), the soil becomes contaminated with worm eggs.



Roundworms, whipworms and hookworms are also spread when faeces are used as fertiliser.



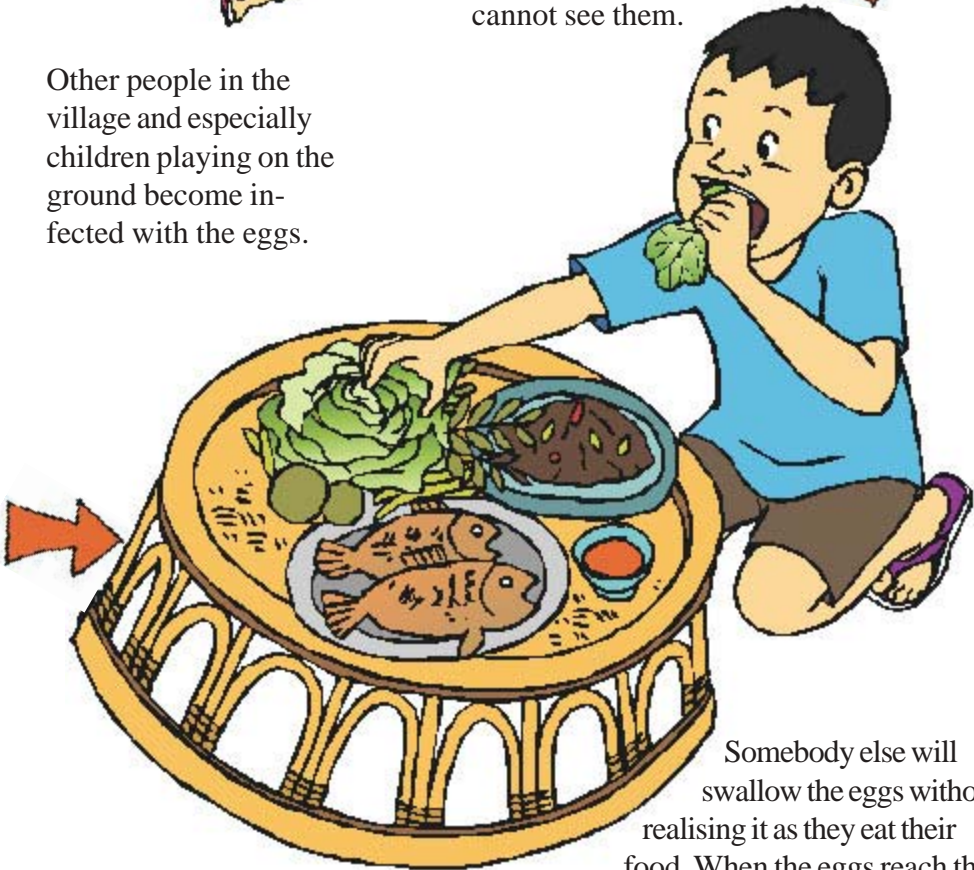
The vegetables may grow well but their leaves will be covered with worm eggs.



Their hands are covered with eggs so small they cannot see them.



Other people in the village and especially children playing on the ground become infected with the eggs.

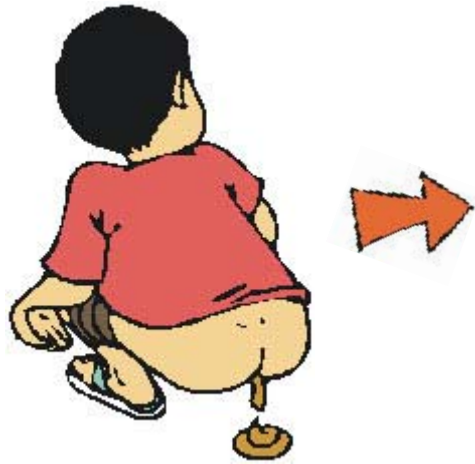


Somebody else will swallow the eggs without realising it as they eat their food. When the eggs reach the intestine, they develop into adult worms. Another person has become infected.

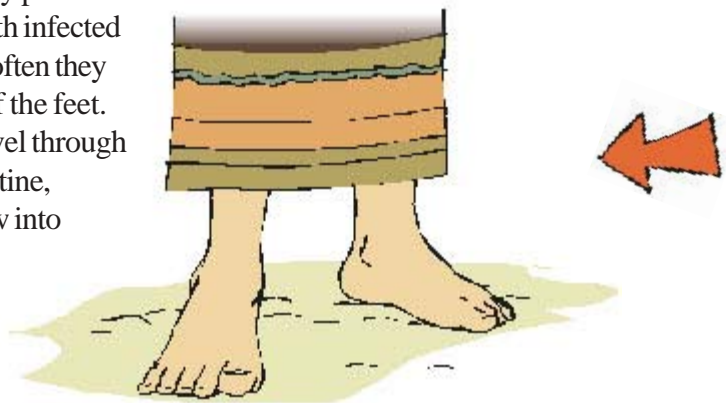


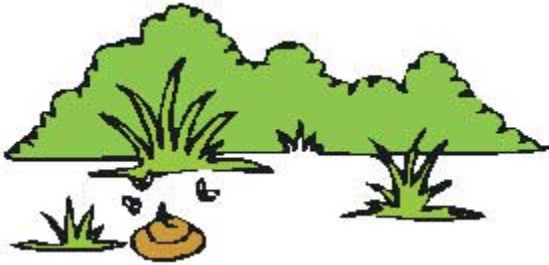
# How are hookworms spread?

Like the other parasites, hookworms are spread when an infected person does not use a latrine but defecates outside.



Hookworm larvae can enter the body through any part that comes in contact with infected soil, although most often they penetrate the skin of the feet. In the body they travel through the lungs to the intestine, where they will grow into adults.

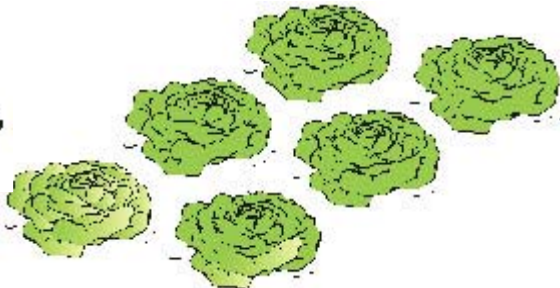




The soil becomes infected with eggs from the parasite. The eggs hatch into larvae and the larvae burrow through the skin into the body.



Others in the village become infected, especially if they do not wear shoes. In the picture you can see a woman working in her garden in bare feet. She will catch hook-worm.



# What are the symptoms?

Applies for Roundworms,  
Hookworms & Whipworms.

In case of  
**heavy infection** *(many worms):*

Loss of appetite



Absorption of food is reduced,  
abdominal pain.



Physical performance decreases



Does not do well at school



Vitamin A deficiency  
*(results in blindness, dry eyes)*



Anemia  
*(Hookworm only)*



Malnutrition



Intestinal obstruction







# How can I treat them?

Applies for Roundworms,  
Hookworms & Whipworm.

**If you suspect infection, seek treatment as soon as possible with your local doctor or health worker!**

This is the recommended drug in case of parasitic infections.

## MEBENDAZOLE



- Take a single tablet (500 mgs) every 6 months.
- Chew it before swallowing

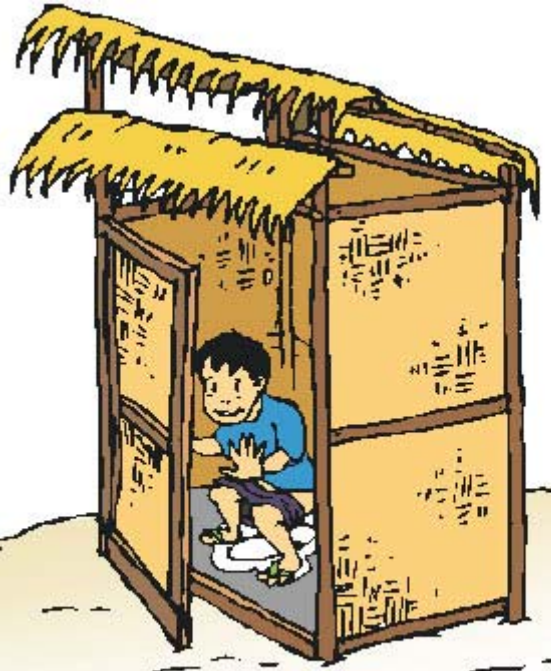
The tablets should be prescribed by a qualified doctor or health worker.

School teachers are also able to provide the drugs during mass treatment day.



# How can I prevent infections by soil-transmitted helminths?

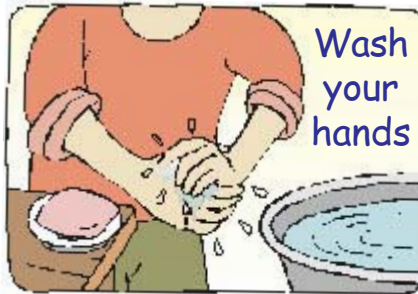
If there are no latrines, defecate far away from houses...



It is easy to prevent infection. Use a latrine whenever possible. By using a latrine you are keeping the environment safe.

If there is no latrine for you to use, go a long way from the nearest house and dig a hole. Defecate into the hole and cover it with soil after you have finished.

Always wash your hands with soap after going to the toilet and before eating. Washing will get rid of any eggs you have picked up.



Wash vegetables thoroughly in water that has been made safe by filtering and boiling. You can add a little salt or vinegar for an even better effect.



Cut your finger and feet nails short because they may carry germs and parasites eggs.



Cut your nails

Always wear shoes or slippers outside so your feet are not in direct contact with the soil.



