

GIARDIA: YOUR HEALTH MAY BE AT RISK**Edith Shaw¹**

This up-date on *Giardia* is based on information supplied by the Health Resource Centre of the Canterbury Area Health Board (May 1990).

Throughout the past year there have been numerous media references to *Giardia* posing a threat to human health if untreated water is drunk whilst tramping or camping. There are definitely endemic sources of *Giardia* in both North and South Islands. At least three species of *Giardia* are here in New Zealand but only one, *Giardia lamblia*, is recognised as causing infections in humans. *Giardia* is a flagellated protozoan parasite of the small intestine, is common in many countries, and seems to be on the increase in New Zealand.

Giardiasis (the disease) affects people in different ways. In some people the effects are minor, but frequently infected people suffer mild disturbance of the intestine and diarrhoea. In severe cases there is a sudden onset of severe diarrhoea and abdominal cramps, nausea and vomiting. Chills, fever and headache may precede or accompany the diarrhoea.

Giardia cannot live for long outside the body of the host, but it can transform itself into an inactive cyst. People who have had the infection may become carriers, passing the cysts in their faeces for months or even years. The cysts can survive in water for long periods and once they enter a host who drinks contaminated water, they can change back to the active form. THIS IS WHEN ILLNESS SETS IN.

Waterways near popular public places are at greatest risk but if *Giardia* becomes established in wild animals such as deer, goats and pigs there may be continual recontamination of streams. Also at risk are farm settlements and small communities whose water supplies are from shallow wells, water races and other sources which are vulnerable to animal contamination or inefficient sewage disposal. *Giardia* is water-borne but little is known of its distribution in New Zealand waterways. Until research is carried out, all stream water should be regarded as contaminated.

To Prevent Giardiasis:

1. Strain or filter all water.
2. Boil water vigorously for at least 3 minutes. At higher altitudes boil longer because water boils at a lower temperature.
3. Store the water in the container in which it was boiled.

High altitude or cold does not kill *Giardia* and snow and ice are often not as pure as they look, particularly in popular areas and near resorts. Melt snow

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or ice and treat before drinking. Chlorination does not kill *Giardia* cysts and treating water with iodine makes the water taste foul.

The incubation period of Giardiasis is 5-25 days or longer, with a medium period of 7-10 days.

Prescription drugs such as quinacrine hydrochloride, metronidazole, furazolidone, tinidazole or minarozole usually clear the symptoms in a day or two, but you may remain a carrier of the infection. Antibiotics do NOT work against *Giardia*.

Giardia is:

- very difficult to detect;
- present in North and South Islands;
- not just transmitted by water, therefore good personal hygiene is essential.

Therefore in the field treat all water as suspect and boil it

For further information contact your local doctor, health inspector or Health Resource Centre.