



Water Quality

Swimmers' Itch

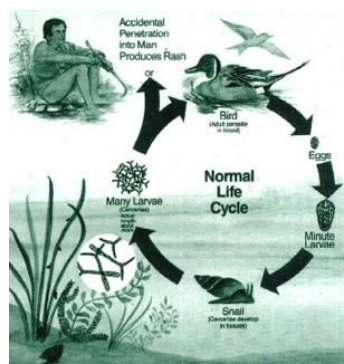
This brochure has been produced to answer the more frequent enquiries received by the Ministry of Environment, Lands and Parks (now called Ministry of Water, Land and Air Protection) on swimmers' itch and to provide you with general information on related water management concerns.

What is Swimmers' Itch?

Swimmers' itch is a natural phenomenon that occurs in many water bodies in British Columbia. It is a temporary skin irritation caused by an invisible parasite found in lakes and ponds.



A life cycle diagram of the parasite is helpful to show the origin of swimmers' itch. The adult parasite lives in the blood of birds, but the eggs of the parasite are passed out of the bird and develop into larvae (cercaria) which seek out snails. As the larvae mature, they pass again into the water to search out a bird to inhabit, but sometimes select a human by mistake. Swimmers' itch is the rash which develops when human antibodies destroy the parasites.



When and Where is Swimmers' Itch Most Likely to Occur?

Swimmers' itch usually occurs during the warm summer months (June - September) which coincides with heaviest beach use.

The larval stages of the parasite concentrate near the water surface where they can contact birds and mammals. Wind will tend to bring the organisms into the shallows, often some distance from the snail hosts in which they had lived. The highest incidence of infection seems to be late in the day after a period of incoming wind.

What are the Symptoms?

Humans are unsuitable hosts for the swimmers' itch larvae, which die soon after entering the skin. Our body reacts to the intrusion in the following manner:

- **Tingling sensations:** shortly after emerging from the water, bathers will notice a tingling sensation on exposed parts of the body.
- **Red spots:** red spots will develop where the organism has penetrated hair follicles.
- **Itching:** hours later, the tingling sensation will disappear, and the red spots will enlarge and become itchy like an insect bite. The degree of discomfort varies with the sensitivity of the individual, the severity of the infestation and prior exposure. The condition may persist for a few days.

What Precautions Can I Take?

You can reduce the chances of contracting swimmers' itch by:

- **Avoiding areas known to be infested:** make enquiries and look for swimmers' itch advisory signs. Avoid dense aquatic vegetation where snails are likely to occur. Enter the water from a boat or wharf, rather than wading in from the beach, to limit exposure.
- **Towelling down:** towelling down briskly upon leaving the water may remove the parasite before it penetrates the skin.
- **Showering:** a shower taken immediately after leaving the water may reduce infection.
- **Applying waterproof suntan lotion:** some believe that use of a waterproof suntan lotion may reduce the risk of infection.

What Can I Do if a Rash Develops?

Your physician can recommend the best treatment. Commonly prescribed treatments are:

- Avoid scratching
- Apply anti-itch lotion (e.g., Calamine Lotion)

- Have a soda bath (three tablespoons in a shallow bath)
- Take antihistamines

Is the Rash Dangerous?

The allergic reaction to swimmers' itch can be unpleasant, but the organism does not enter the blood and the rash does not spread from the initial points of contact. Symptoms usually last for four to five days, although they may persist for up to two weeks.

Can Swimmers' Itch be Controlled at the Source?

It was commonly believed that chemical treatment of snail populations would break the life cycle of the parasite. However, such actions can result in ecological damage and generally are not permitted in public waters. Moreover, the floating stage of the swimmers' itch organism may be blown or carried many hundreds of meters, perhaps kilometers, from the snail source, making chemical control of limited value.

Should I Report Swimmer's Itch?

If the outbreak of cases appears to be severe, please notify the nearest Ministry of Health office or other local authorities (e.g. BC Parks if within a provincial park). The local authorities may decide to post a warning to beach users.