



# What Is Swimmer's Itch and How Can I Avoid It?

LAKE HOME & CABIN KIT • SECOND EDITION

## What Is Swimmer's Itch?

Swimmer's itch, technically known as *schistosoma dermatitis*, is a common malady affecting people in Minnesota's lakes during midsummer. It appears as red, itchy, bite-like welts on the skin within several hours of leaving the water. The irritation may last from a few days to several weeks, depending on an individual's sensitivity. About 30-40 percent of people who come in contact with the parasite that causes the itch are sensitive and experience irritation. There are no reported long-term effects from swimmer's itch and the parasite will not survive in humans.

## How Can I Avoid It?

You can reduce the likelihood of suffering swimmer's itch by following these simple guidelines. Although even careful adherence to the recommendations may not be 100 percent successful in preventing an outbreak, you can minimize the extent of irritation and itching.

1. Dry off as soon as you leave the water. Rub your skin briskly to remove water drops before they begin to evaporate. Be sure to dry underneath waistbands and around leg openings of swimming suits.
2. Don't sit around in your wet swimsuit.
3. Shower with soap and fresh water as soon as possible after swimming.
4. Don't wade or play in shallow water, especially in weedy areas with lots of snails. Swimming from a raft or pontoon minimizes your exposure.
5. Clean beaches of weeds or other debris that has washed up on shore, which can harbor the snails that are host to the swimmer's itch parasite.
6. Don't swim when there has been a breeze blowing toward shore that may have carried parasites to your beach.

7. Don't feed geese and ducks or allow them to congregate near your beach. Waterfowl are an important adult host for the parasites, and swimmer's itch outbreaks seem to be associated with people feeding ducks.

It can be especially difficult to keep children free of swimmer's itch because they frequently play in the shallows and often wear their swimming suits for hours as they play in and out of the water. If you clear debris, watch the wind direction, don't feed waterfowl, and—most importantly—teach them to dry off thoroughly each time they come out of the water, you'll minimize your children's risk of getting swimmer's itch.

## Where Does Swimmer's Itch Come From?

Swimmer's itch comes from a microscopic flatworm parasite (*Schistosoma cercariae*) that lives as an adult in aquatic birds or mammals, usually waterfowl. The adult worm sheds its eggs into the feces of the host, and the eggs are released into the water where they hatch into free-swimming "miracidiae." The miracidiae swim in search of an intermediate host, which can be one of four species of snail that inhabit shallow waters in Minnesota. The host snails live in all sorts of areas including weedy, rocky, and sandy bottoms. After 3-4 weeks in the snail, a second free-swimming stage, called a "cercaria," emerges in search of a primary host (another bird or mammal) to complete its life cycle. The cercariae are about 1/16th inch (2 mm) long and barely visible to the naked eye. It is during this stage that cercariae come into contact with humans and cause swimmer's itch.

The release of cercariae typically occurs in late June or early July, when lakes are nearly at their warmest summer temperatures. If the spring has been very warm, problems with swimmer's itch

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may begin earlier in the summer. Most cercariae are released around midday, and will swim to the surface to increase their chances of finding a host. Wind and currents have been shown to carry cercariae as much as four miles from the area where they were released. Millions of cercariae can infest a typical beach each midsummer day.

When a swimmer leaves the water and the water drops on his or her skin begin to evaporate, the tiny cercariae burrow into the skin in an effort to survive. Sometimes the swimmer feels a tingling sensation on exposed parts of the body. Where water is held near the skin (at waistbands and leg openings) the cercariae have more time to burrow in. The cercariae are killed by the body's natural defense mechanisms, but they cause a welt, or red itchy spot like a mosquito bite. People cannot become a host for the parasite, either through skin penetration or by swallowing lake water.

## Can Swimmer's Itch Be Treated?

Some sunscreens and lotions may reduce the infections, although nothing is known to be completely effective. If you get swimmers' itch, lotions or ointments may relieve the itching. In severe cases, you may need antihistamines or steroid creams that can be prescribed by a physician.

People often want to control the snail hosts or the free-swimming cercariae, but neither option is practical because the cercariae can swim or be carried long distances. To control severe infestations of snails, the application of copper sulfate in the lake is a possibility, but it requires application over a large area and copper sulfate can also kill small fish. Waters treated with copper sulfate should not be used for 48 hours after application. **ANY** chemical treatment in the water requires a permit from the Minnesota Department of Natural Resources (MN DNR), Section of Fisheries. Contact your regional MN DNR fisheries office for assistance and permit information.

*Source: University of Minnesota Extension Service Faculty.*

## Want to know more?

### INFORMATION ON THE WEB

[www.dnr.state.mn.us/swimming/swimmersitch.html](http://www.dnr.state.mn.us/swimming/swimmersitch.html)

### WHERE TO CALL

Minnesota Department of Natural Resources,  
651-296-6157 or 1-888-646-6367

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