Cercarial Dermatitis
(sir-CARE-ee-uhl der-muh-TIGHT-iss)

What is swimmer's itch?

Swimmer's itch, also called cercarial dermatitis, appears as a skin rash caused by an allergic reaction to certain parasites found in certain birds and mammals. These microscopic parasites are released from infected snails into fresh and salt water (such as lakes, ponds, and oceans). Rather than finding a host bird or mammal, the parasite instead burrows into the nearby swimmer's skin, causing an allergic reaction and rash. Swimmer's itch is found throughout the world and is more frequent during summer months.

How does water become infested with the parasite?

The adult parasite lives in the blood of infected animals such as ducks, geese, gulls, swans, and certain aquatic mammals such as muskrats and beavers. The parasites produce eggs that are passed in the feces of infected birds or mammals.

If the eggs land in the water, the water becomes contaminated. Eggs hatch, releasing small, free-swimming larvae. These larvae swim in the water in search of a certain species of aquatic snail.

If the larvae find one of these snails, they infect the snail and undergo further development. Infected snails release a different type of larvae (*cercariae*, hence the name cercarial dermatitis) into the water. This larval form then swims about searching for a suitable host (bird, muskrat) so they can start the lifecycle over again. Although humans are not suitable hosts, the larvae burrow into the swimmer's skin, and may cause an allergic reaction and rash. Because these larvae cannot develop inside a human, they soon die.

What are the signs and symptoms of swimmer's itch?

Symptoms of swimmer's itch may include:

- tingling, burning, or itching of the skin
- small reddish pimples
- small blisters

Within minutes to days after swimming in contaminated water, you may experience tingling, burning, or itching of the skin. Small reddish pimples appear within twelve hours. Pimples may develop into small blisters. Scratching the areas may result in secondary bacterial infections. Itching may last up to a week or more, but will gradually go away.

Because swimmer's itch is caused by an allergic reaction to infection, the more often you swim or wade in contaminated water, the more likely you are to develop more serious symptoms. The greater the number of exposures to contaminated water, the more intense and immediate symptoms of swimmer's itch will be.

Be aware that swimmer's itch is not the only rash that may occur after swimming in fresh and salt water.

Do I need to see my health care provider for treatment?

Most cases of swimmer's itch do not require medical attention. If you have a rash, you may try the following for relief:

- Use corticosteroid cream
- Apply cool compresses to the affected areas
- Bathe in Epson salts or baking soda

- Soak in colloidal oatmeal baths, such as Aveeno*
- Apply baking soda paste to the rash (made by stirring water into baking soda until it reaches a paste-like consistency)
- Use an anti-itch lotion, such as Calamine* lotion

Though difficult, try not to scratch. Scratching may cause the rash to become infected. If itching is severe, your health care provider may suggest prescription-strength lotions or creams to lessen your symptoms.

Can swimmer's itch be spread from person-to-person?

Swimmer's itch is not contagious and cannot be spread from one person to another.

Who is at risk for swimmer's itch?

Anyone who swims or wades in infested water may be at risk. Larvae are more likely to be present in shallow water by the shoreline. Children are most often affected because they tend to swim, wade, and play in the shallow water more than adults. Also, they are less likely to towel dry themselves when leaving the water.

Once an outbreak of swimmer's itch has occurred in water, will the water always be unsafe?

No. Many factors must be present for swimmer's itch to become a problem in water. Since these factors change (sometimes within a swim season), swimmer's itch will not always be a problem. However, there is no way to know how long water may be unsafe. Larvae generally survive for 24 hours once they are released from the snail. However, an infected snail will continue to produce *cercariae* throughout the remainder of its life. For future snails to become infected, migratory birds or mammals in the area must also be infected so the lifecycle can continue.

Is it safe to swim in my swimming pool?

Yes. As long as your swimming pool is well maintained and chlorinated, there is no risk of swimmer's itch.

What can be done to reduce the risk of swimmer's itch?

To reduce the likelihood of developing swimmer's itch

1. Do not swim in areas where swimmer's itch is a known problem or where signs have been posted warning of unsafe water.
2. Do not swim near or wade in marshy areas where snails are commonly found.
3. Towel dry or shower immediately after leaving the water.
4. Do not attract birds (e.g., by feeding them) to areas where people are swimming.

Encourage health officials to post signs on shorelines where swimmer's itch is a current problem.
For further information on protecting yourself from recreational water illnesses, please visit http://www.cdc.gov/healthyswimming/index.htm

* Use of trade names is for identification only and does not imply endorsement by the Public Health Service or by the U.S. Department of Health and Human Services.

This fact sheet is for information only and is not meant to be used for self-diagnosis or as a substitute for consultation with a health care provider. If you have any questions about the disease described above or think that you may have a parasitic infection, consult a health care provider.