

Also Known As: Bilharzia



What is Schistosomiasis?

Schistosomiasis, also known as bilharzia, is a disease caused by parasitic worms. Although the worms that cause schistosomiasis are not found in the United States, more than 200 million people are infected worldwide.

How is it Spread?



Infection occurs when skin comes in contact with contaminated freshwater in which certain types of snails that carry schistosomes are living.

Freshwater becomes contaminated by *Schistosoma* eggs when infected people urinate or defecate in the water. The eggs hatch, and if certain types of freshwater snails are present in the water, the parasites develop and multiply inside the snails. The parasite leaves the snail and enters the water where it can survive for about 48 hours. *Schistosoma* parasites can penetrate the skin of persons who are wading, swimming, bathing, or washing in contaminated water. Within several weeks, parasite mature into adult worms, residing in the blood vessels of the body where the females produce eggs. Some of the eggs travel to the bladder or intestine and are passed into the urine or stool.

Signs and Symptoms

Within days after becoming infected, you may develop a rash or itchy skin. Fever, chills, cough, and muscle aches can begin within 1-2 months of infection. Most people have no symptoms at this early phase of infection.

When adult worms are present, the eggs that are produced usually travel to the intestine, liver or bladder, causing inflammation or scarring. Children who are repeatedly infected can develop anemia, malnutrition, and learning difficulties. After years of infection, the parasite can also damage the liver, intestine, lungs, and bladder. Rarely, eggs are found in the brain or spinal cord and can cause seizures, paralysis, or spinal cord inflammation.

Symptoms of schistosomiasis are caused by the body's reaction to the eggs produced by worms, not by the worms themselves.

Diagnosis

See a health care provider. Describe in detail any travel to countries where schistosomiasis is found including contact with freshwater.

A health care provider may ask for stool or urine samples to see if the parasite is present. A blood sample can also be tested for evidence of infection. For accurate results, a person must wait 6-8 weeks after their last exposure to contaminated water before the blood sample is taken.

Treatment

Safe and effective drugs are available for the treatment of schistosomiasis. Praziquantel is the recommended treatment drug. See a health care provider for appropriate diagnosis and treatment.

People at Risk

People who live in or travel to areas where schistosomiasis occurs and where skin comes in contact with freshwater from canals, rivers, streams, ponds, or lakes are at risk of getting schistosomiasis.

Prevention

- Avoid swimming or wading in freshwater when you are in countries in which schistosomiasis occurs. Swimming in the ocean and in chlorinated swimming pools is safe.
- Drink safe water. Although schistosomiasis is not transmitted by swallowing contaminated water, if a person's mouth or lips come in contact with water containing the parasites, the person could become infected. Because water coming directly from canals, lakes, rivers, streams, or springs may be contaminated with a variety of infectious organisms. Water should be boiled for 1 minute or filtered before drinking. Boiling water for at least 1 minute will kill any harmful parasites, bacteria, or viruses present. Iodine treatment alone <u>WILL NOT GUARANTEE</u> that water is safe and free of all parasites.
- Bath water should be heated to a rolling boil for at least 1 minute. Water held in a storage tank for at least 1-2 days should be safe for bathing.
- Vigorous towel drying after an accidental, very brief water exposure may help to prevent the Schistosoma parasite from penetrating the skin. Do NOT rely on vigorous towel drying to prevent schistosomiasis.



For more sources of information on this topic visit:

ST. CLAIR COUNTY HEALTH DEPARTMENT <u>www.scchealth.co</u> MICHIGAN DEPARTMENT OF HEALTH AND HUMAN SERVICES <u>www.michigan.gov/mdhhs</u> CENTERS FOR DISEASE CONTROL AND PREVENTION <u>www.cdc.gov</u>