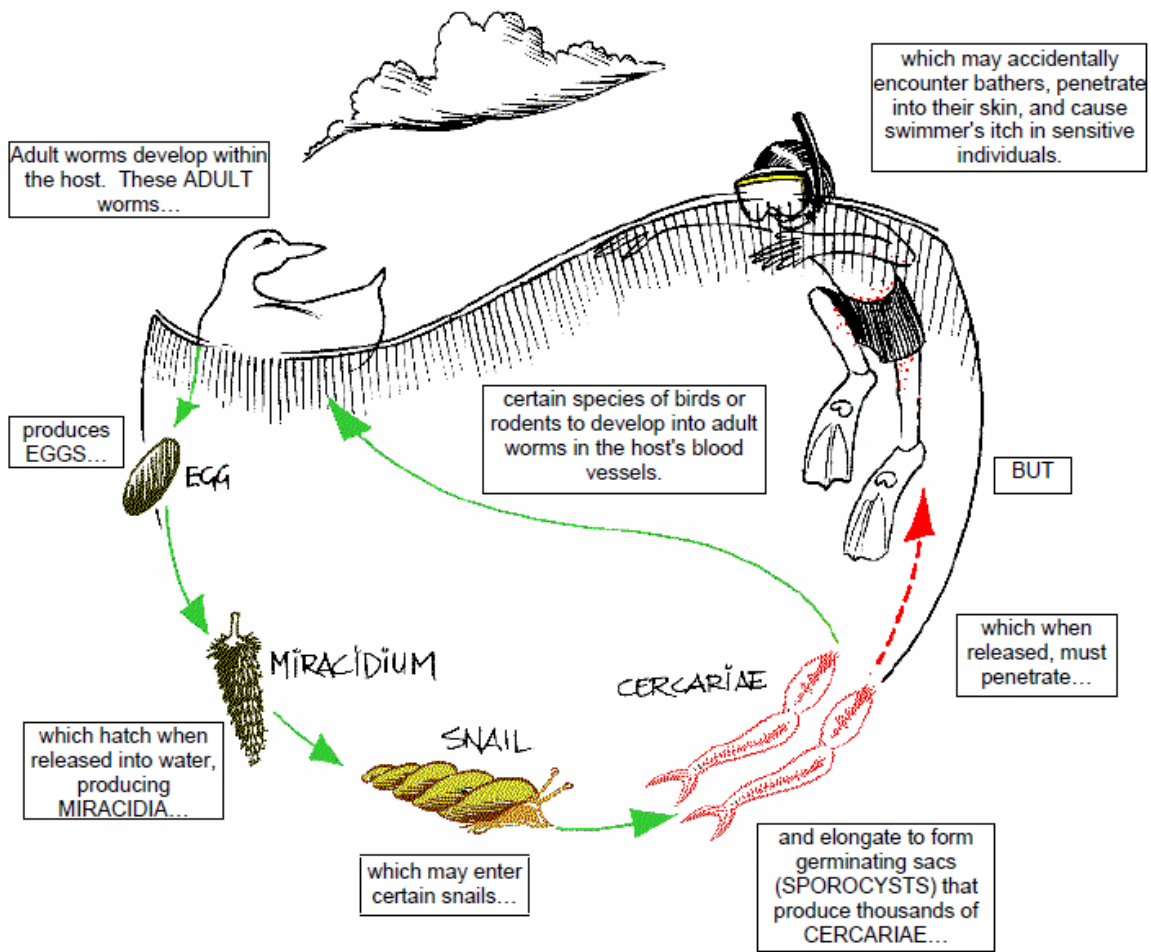


Report to the Board of Health  
 August 30, 2013  
 Robert Graham, DO, MPH  
 Medical Director

- Swimmer's Itch
- Tuberculosis

**Swimmer's Itch:** Speaking from personal experience I can attest that swimmer's itch is a miserable, intensely distracting nuisance. The lifecycle of swimmer's itch is illustrated on below. This report will focus on the methods to reduce the chances of being affected.

Figure 1. Summary of the Life Cycle of the Causative Agents of Swimmer's Itch



In no particular order, people that use the tens of thousands of inland lakes can do the following:

- Don't ever feed waterfowl. Don't feed geese, ducks, mergansers, or seagulls. Feeding these birds increases the chance that they will become infested with the parasite and continue to spread the parasite
- Remove rip-rap such as old chunks of concrete and water-logged lumber from near the shore where snails like to roam

- Reduce or eliminate the use of phosphate containing fertilizer on areas where surface water will run into the lake. Phosphates will promote the growth of snails
- Swim on the windward side of a lake. Wind will push the parasite toward the onshore wind side of a lake
- Snails can be killed using copper sulfate at a rate of two pounds per 1,000 square feet. The copper sulfate will kill many of the participants of the food chain; however, and might be harmful to fish.
- Copper sulfate can be toxic to humans. It should only be applied by professional exterminators. A permit is required to apply copper sulfate.
- A thorough rinsing off of the entire surface of the skin after emerging from the lake is important.
- If rinsing with water is not feasible then vigorous toweling should be performed.
- Once the rash has developed and the itching has started treatment can consist of antihistamines and hydrocortisone cream both of which are available over the counter. In spite of treatment, the itching may persist for four or five days.<sup>1</sup>

There is a link to information about swimmer's itch on the Central Michigan District Health Department's internet website at: [http://www.cmdhd.org/pdf/FactSheets/Swimmers Itch Fact Sheet.pdf](http://www.cmdhd.org/pdf/FactSheets/Swimmers%20Itch%20Fact%20Sheet.pdf)

### **Recommendation of the Board of Health:**

To reduce the likelihood of contracting swimmer's itch:

- Thoroughly rinse off each time you leave the lake or vigorously towel off after leaving the lake.
- Remove rip-rap from around your favorite swimming area.
- Do not feed or encourage waterfowl to remain in your favorite swimming

**Tuberculosis:** Control of tuberculosis is a legacy program of all health departments. Tuberculosis was once the most common infectious disease in the world. Now, in developed countries the rate of tuberculosis disease and death from tuberculosis is very uncommon. Tuberculosis can reside in a person for years and never cause harm. This is called Latent Tuberculosis Infection or LTBI. In some individuals the tuberculosis germ can become activated and cause disease such as a lung infection. This is called tuberculosis disease. If a tuberculosis infection isn't caught in time a person can succumb to the disease. Additionally, the tubercular person can spread TB to others.

The United States, and in particular the Central Michigan District Health Department, District Health Department 10, and the Mid-Michigan District Health Department have had a procedure in place for at least 15 years in which we have tested people at high risk for the development of tuberculosis. If a person is diagnosed with LTBI, they are offered a course of treatment to rid their body of the tuberculosis germ.

A test for LTBI is called the Tuberculin Skin Test (TST). The TST uses a compound called the purified protein derivative (PPD). There are two other tests used for tuberculosis infection that require blood be drawn. The TST has been the standard test for the presence of tuberculosis for a long time. The blood tests are relatively new.

At this time there is a shortage of PPD. Many colleges, health care provider systems, and daycare centers require people to have a TST. Our local health departments are the primary source for TST because of our history of providing tuberculosis control, our expertise in diagnosing and treating tuberculosis, and the Public Health Code requires us to control TB.

We will continue to provide TST as long as we have sufficient supplies. We are keeping a reserve amount of PPD on hand in the case of an outbreak of TB in one of our counties. If we totally run out of PPD and we have to investigate a case of tuberculosis, we may have to use the blood tests.

The main concern with blood tests is the cost. If a person is exposed to tuberculosis we will want to know if the person was infected with tuberculosis. We need to know if a person was infected with the TB germ so we can put the person on preventative treatment.

If the person has no way to pay for the blood test, then the county where the person resides would have to pay for the testing and treatment. This is from Part 53 of the Public Health Code known as “Expense of Care”.

This information is given to the members of the Boards of Health to alert the commissioners that in the unlikely event that our supply of PPD is depleted, and we have an active case of tuberculosis, there might be a cost charged to a county’s communicable disease fund. If this scenario occurs, we will notify and cooperate with county involved.

---

AQUATIC NUISANCE CONTROL AND REMEDIAL ACTION UNIT  
WATER BUREAU  
MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

Parasites - Cercarial Dermatitis (also known as Swimmer's Itch) Centers for Disease Control and Prevention, January 10, 2012