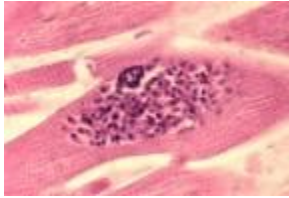


What is Toxoplasmosis?



A single-celled parasite called *Toxoplasma gondii* causes a disease known as toxoplasmosis. While the parasite is found throughout the world, more than 60 million people in the United States may be infected with the *Toxoplasma* parasite. Of those who are infected, very few have symptoms because a healthy person's immune system usually keeps the parasite from causing illness. However, pregnant women and individuals who have compromised immune systems should be cautious; for them, a *Toxoplasma* infection could cause serious health problems.

Spread of Disease

A *Toxoplasma* infection occurs by:

- Eating undercooked, contaminated meat (especially pork, lamb, and venison).
- Eating food that was contaminated by knives, utensils, cutting boards and other foods that have had contact with raw, contaminated meat.
- Drinking water contaminated with *Toxoplasma gondii*.
- Accidentally swallowing the parasite through contact with cat feces that contain *Toxoplasma*. This might happen by:
 - cleaning a cat's litter box when the cat has shed *Toxoplasma* in its feces
 - touching or ingesting anything that has come into contact with cat feces that contain *Toxoplasma*
 - accidentally ingesting contaminated soil (e.g., not washing hands after gardening or eating unwashed fruits or vegetables from a garden)
- Mother-to-child (congenital) transmission.
- Receiving an infected organ transplant or infected blood via transfusion, though this is rare.

Signs and Symptoms

Most people who become infected with *Toxoplasma gondii* are not aware of it. However, some people who have toxoplasmosis may feel as if they have the "flu" with swollen lymph glands or muscle aches and pains that last for a month or more.

Severe toxoplasmosis, causing damage to the brain, eyes, or other organs, can develop from an acute *Toxoplasma* infection or one that had occurred earlier in life and is now reactivated. Severe cases are more likely in individuals who have weak immune systems, though occasionally, even persons with healthy immune systems may experience eye damage from toxoplasmosis.

Signs and symptoms of ocular toxoplasmosis can include reduced vision, blurred vision, pain (often with bright light), redness of the eye, and sometimes tearing. Ophthalmologists sometimes prescribe medicine to treat active disease. Whether or not medication is recommended depends on the size of the eye lesion, the location, and the characteristics of the lesion (acute active, versus chronic not progressing). An ophthalmologist will provide the best care for ocular toxoplasmosis. Most infants who are infected while still in the womb have no symptoms at birth, but they may develop symptoms later in life. A small percentage of infected newborns have serious eye or brain damage at birth.

Diagnosis

If a person suspects they have toxoplasmosis, talk to a health care provider. The provider may order one or more varieties of blood tests specific for toxoplasmosis. The results from the different tests can help the provider determine if it is *Toxoplasma gondii* infection and whether it is a recent (acute) infection.

Treatment

Once a diagnosis of toxoplasmosis is confirmed, discuss with health care provider whether treatment is necessary. In an otherwise healthy person who is not pregnant, treatment usually is not needed. If symptoms occur, they typically go away within a few weeks to months. For pregnant women or persons who have weakened immune systems, medications are available to treat toxoplasmosis.

People at Risk

People who are most likely to develop severe toxoplasmosis include:

- Infants born to mothers who are newly infected with *Toxoplasma gondii* during or just before pregnancy.
- Persons with severely weakened immune systems, such as individuals with AIDS, those taking certain types of chemotherapy, and those who have recently received an organ transplant.

Prevention

There are several general sanitation and food safety steps to take to reduce the chances of becoming infected with *Toxoplasma gondii*.

- Cook food to safe temperatures. A food thermometer should be used to measure the internal temperature of cooked meat. Do not sample meat until it is cooked.
- Freeze meat for several days at sub-zero (0° F) temperatures before cooking to greatly reduce chance of infection.
- Peel or wash fruits and vegetables thoroughly before eating.
- Do not eat raw or undercooked oysters, mussels, or clams (these may be contaminated with *Toxoplasma* that has washed into sea water).
- Do not drink unpasteurized goat's milk.
- Wash cutting boards, dishes, counters, utensils, and hands with hot soapy water after contact with raw meat, poultry, seafood, or unwashed fruits or vegetables.
- Wear gloves when gardening and during any contact with soil or sand because it might be contaminated with cat feces that contain *Toxoplasma*. Wash hands with soap and warm water after gardening or contact with soil or sand.
- Teach children the importance of washing hands to prevent infection.



For more sources of information on this topic visit:

ST. CLAIR COUNTY HEALTH DEPARTMENT www.scchealth.co

MICHIGAN DEPARTMENT OF HEALTH AND HUMAN SERVICES www.michigan.gov/mdhhs

CENTERS FOR DISEASE CONTROL AND PREVENTION www.cdc.gov