

# TOXOPLASMOSIS, CONGENITAL TOXOPLASMOSIS

## REPORTING INFORMATION

- Class A(3) - congenital, report by close of work week
- Class C - suspected outbreak, report by end of next working day
- [Confidential Case Report Card](#) (3812.11, rev. 12/81), [lab report](#) (3833.11), or telephone

## AGENT

*Toxoplasma gondii*, an intracellular protozoan; classified as a sporozoan of the order Coccidia.

## CASE DEFINITION

There is currently no case definition for either toxoplasmosis or congenital toxoplasmosis published in the CDC "Case Definitions for Infectious Conditions Under Public Health Surveillance." Determination of a case or an outbreak should be made based on signs and symptoms and diagnosis as described below. Congenital cases are defined as those with an onset at age  $\leq 60$  days old.

## SIGNS AND SYMPTOMS

Humans are commonly exposed but rarely develop clinical illness. Up to one-third of the population in some areas of the U.S. have antibodies indicating exposure. Among persons with acquired toxoplasmosis, lymphadenopathy (commonly the posterior cervical nodes), malaise, fever, and myalgias are the most frequent signs.

Toxoplasmosis is sometimes confused with Epstein-Barr virus infection (infectious mononucleosis) because of the symptoms and their long duration. Spontaneous resolution occurs in the majority of patients. Serious disease such as encephalitis, myocarditis, pneumonitis, and retinochoroiditis may occur in people with immune system problems, such as HIV/AIDS, organ transplant recipients, and infants infected before birth. In these patients, either the initial infection cannot be contained or the latent infection is activated by the failure of the immune system.

Fetuses of previously uninfected women exposed to toxoplasmosis during pregnancy can become infected through the placenta. Many exposed infants have no symptoms at all but serious disease is possible. Mothers who are exposed to toxoplasma more than six months before becoming pregnant are not likely to pass the infection on to their child.

## DIAGNOSIS

*Toxoplasma* organisms are rarely detected in humans, therefore serology is the best diagnostic method. ODHL can refer specimens to CDC for testing.

## EPIDEMIOLOGY

Cats are the definitive hosts for toxoplasmosis and are infected by ingesting oocysts (eggs) in soil or by eating infected rodents. Following acute infection, cats shed oocysts up to three weeks, after which most cats develop a life-long immunity, never shedding eggs again. Oocysts remain viable in soil for up to 18 months. Humans and other animals are infected by consuming soil or unwashed fruits and vegetables contaminated with oocysts. Once consumed, oocysts spread via lymph to muscle tissue and other organs where they encyst for the life of the host. Secondary transmission occurs when carnivores or humans consume raw or undercooked meat containing cysts. Undercooked pork, lamb, and wild game have been most often associated with human cases.

## PUBLIC HEALTH MANAGEMENT

### Prevention and Control

Feed cats only dry, canned, or cooked food. Prevent cats from catching birds or mice. Indoor cats should remain indoors and outdoor cats should remain outdoors. Pregnant women and immunocompromised patients should not handle cat litter. Clean cat box daily.

Wash hands thoroughly after handling soil, cat litter, and raw meat.

Cook meat thoroughly. Drink only pasteurized milk.

Wear gloves when working in soil.