

Toxoplasmosis

What is toxoplasmosis and what causes it?

Toxoplasmosis (tox-oooh-plas-moe-sis) is a disease caused by a microscopic protozoal parasite called *Toxoplasma gondii* (tox-oooh-plas-ma gon-dee-eye). The organism has a complex life cycle and is found worldwide.

What animals get toxoplasmosis?

Many animal species can get toxoplasmosis. Cats are required for the life cycle of the organism. Infection is most common in cats, sheep, goats, and swine. Cattle seem to be relatively resistant. Dogs can also be infected.

How can my animal get toxoplasmosis?

Toxoplasma gondii oocysts (eggs) are shed in the feces of infected cats. These eggs are then incidentally ingested (**oral**) by other animals, either through grazing or eating smaller mammals, such as when cats hunt small rodents. The protozoa can also be transmitted during pregnancy thereby infecting the unborn fetuses.

How does toxoplasmosis affect my animal?

Most animals that have toxoplasmosis show no signs of illness. Disease is most often seen and the most severe in young animals, such as puppies or kittens. In adult animals, particularly sheep, the most commonly noted sign is abortion. Cats may have signs of pneumonia or damage to the nervous system or eyes. Affected dogs may show signs of encephalitis, such as seizures, head tilt, tremors, or paralysis. The organs can also be affected.

Can I get toxoplasmosis?

Yes. Humans can get toxoplasmosis by ingesting (**oral**) *Toxoplasma gondii* eggs or cysts from fecally contaminated (raw vegetables) or undercooked food (meat). It can also be spread through contact with feces from an infected cat.

Disease is rare in people who are healthy. The greatest risk of disease is to those with weakened immune systems (i.e., cancer or AIDS patients, children, or pregnant women).

Symptoms can begin with mild, flu-like signs (fever, body aches, headache, sore throat). Severe disease can occur if the protozoan invades the muscles, nervous system, heart, lungs or eye. The organism can cause abortion or birth defects in pregnant women. It can cause brain infection and death in persons with AIDS.

Who should I contact, if I suspect toxoplasmosis?

In Animals –

Contact your veterinarian.

In Humans –

Contact your physician.

How can I protect my animal from toxoplasmosis?

Keep cats indoors to prevent cats from becoming infected or shedding the oocysts into the environment. They should be especially kept out of livestock areas. Feed animals commercially prepared foods. Raw or undercooked meats should not be fed.

How can I protect myself from toxoplasmosis?

The risk of infection can be reduced by proper food preparation. Meats should be thoroughly cooked. Good hygiene is also important. Wash fruits and vegetables before eating them. Avoid cross contamination in the kitchen and wash items in contact with meat in hot, soapy water. Wear gloves while gardening or when changing the litter box to avoid contact with cat feces. Always wash your hands after contact with any animal. Pregnant women and immunocompromised individuals should avoid cleaning cat litter if possible.

For More Information

CFSPH Technical Fact Sheet. Toxoplasmosis at <http://www.cfsph.iastate.edu/DiseaseInfo/default.htm>

CDC website Toxoplasmosis at <http://www.cdc.gov/ncidod/dpd/parasites/toxoplasmosis/default.htm>



Toxoplasmosis
is a protozoan
shed in cat feces that can
be spread to humans by a
variety of ways.

Photos (counterclockwise) a cat, *Toxoplasma* oocysts, cyst, and potential ingestion sources: raw or undercooked meat or unwashed vegetables.