

Prevent *Toxoplasma gondii* infection

- Cook meat to an internal temperature of 151°F or until all appearance of pinkness has disappeared.
- Wash meat preparation utensils and cutting boards with hot, soapy water.
- Feed your cat dry or canned cat food, or cook fresh meat thoroughly before feeding it to your cat.
- Rinse vegetables to be consumed raw thoroughly with tap water before eating.
- Avoid drinking water from creeks and streams.
- Wash your hands after gardening and soil contact, taking care to clean dirt from under your nails.
- Wash your hands thoroughly with warm, soapy water after cleaning out the cat litter box.
- Clean out your cat litter box daily—it generally takes about 24 hours for the oocyst to become infective.
- To prevent spread of oocysts in soils near your home, place cat feces collected from the litter box or your yard in plastic bags, and dispose of them in your garbage. DO NOT flush your cat litter down the toilet or deposit it outdoors.



Protect your environment

Keep water going to sewage treatment plants or septic systems *T. gondii*-free. Cat feces in your yard can also reach oceans and rivers in storm runoff.

Current methods of sewage treatment may not destroy all of the oocysts in cat feces. Throwing cat litter down the toilet or outdoors could put *T. gondii* oocysts into our water treatment systems, and ultimately into our rivers and oceans.

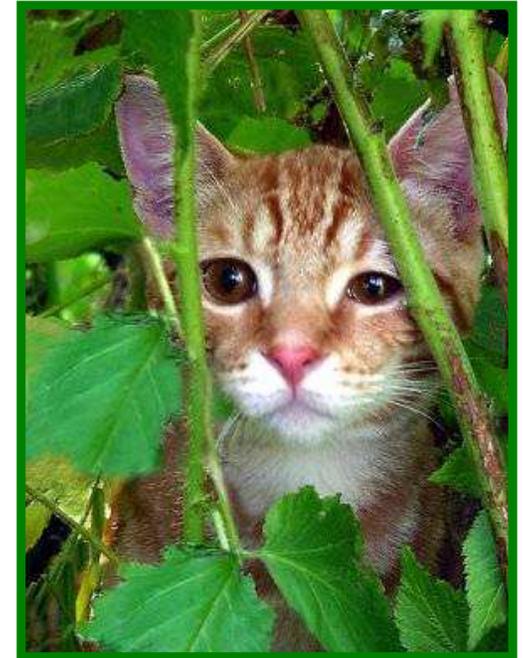
- Dispose of all cat feces in plastic bags in your trash can.
- Remove cat feces found in your yard. The oocysts are very hardy, may accumulate in the environment, and are spread by water and insects.

Following these guidelines will help prevent *T. gondii* infections in humans and their pets.

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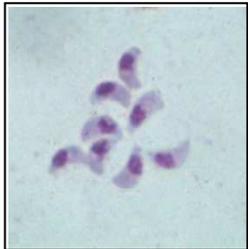
Toxoplasma gondii

What everyone should know

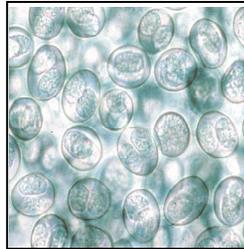


Toxoplasma gondii

- *Toxoplasma* is a small, single-celled parasite (left) with a complicated life cycle that infects some birds and most mammals, including humans. The egg-like stage of the parasite is called the oocyst (right).



Toxoplasma tachyzoites

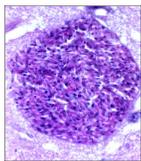


oocysts in cat feces

- Only cats and members of the cat family, including mountain lions (center) and bobcats (right), shed *Toxoplasma* oocysts in their feces. After initial infection, cats may shed millions of oocysts in their feces over a 7-14 day period.

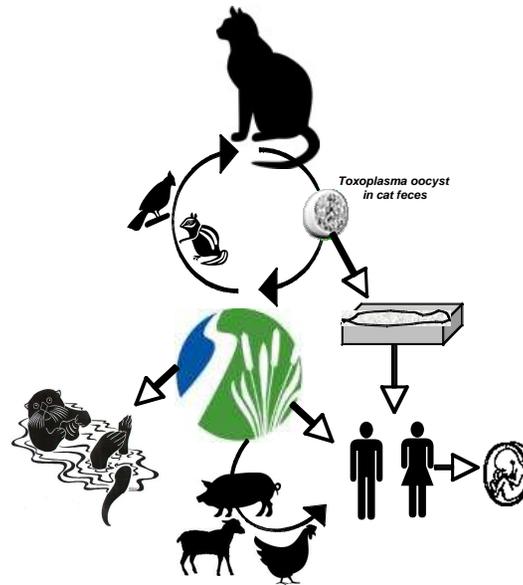


- Infective stages of the parasite spread to tissues and cause tissue cysts in places like the lung, spleen, eye and brain of cats and other hosts.



Toxoplasma tissue cyst

How do cats and humans become infected?



Infection may occur by:

- Eating raw or undercooked meat containing the tissue cyst stage of the parasite - cats are often infected by ingesting infected birds and rodents.
- Drinking water contaminated with oocysts.
- Ingesting or inhaling oocysts while gardening or playing in soil contaminated with infected cat feces.
- Ingesting or inhaling oocysts while removing feces from the cat litter box.
- If a pregnant woman is infected for the first time during pregnancy, the parasite may be transmitted to the baby in the womb.

Recent studies suggest shellfish (mussels, oysters) can uptake oocysts from contaminated water. Therefore, shellfish, like other meat, should be cooked.

Symptoms of infection

Toxoplasma rarely causes fatal infections in humans or their cats.

Most cat owners will never know their cat has been infected with the parasite, but studies show that 40-80% of cats in the U.S.A. have been exposed to *Toxoplasma* at some time in their lives.

Symptoms of infection in humans can last about 2 weeks and may include:

- Fever
- Headache and muscle aches
- Sore throat and cough
- Flu-like symptoms
- Swollen lymph nodes, especially in the neck

Many people have such mild symptoms, they don't know they were ever infected.

Severe disease may result if a person infected with *Toxoplasma* undergoes immunosuppressive or chemotherapy, or becomes HIV-infected. In these situations, parasites encysted in tissues may become reactivated and cause encephalitis (brain inflammation),

Infection of an unborn child may cause birth defects, blindness and brain damage.

If you think you may have been exposed to *Toxoplasma* and might be infected, consult your doctor.