

Cats Are Primary Hosts for This, but These 3 Are More Likely

Cats get an unfair bad rap for this parasite. But in the US, these 3 exposures are far more likely to be the culprit, and cat ownership isn't even a common route of infection. Here's what you need to know, and the common sense precautions that'll help you avoid it.

Analysis by [Dr. Karen Shaw Becker](#)

STORY AT-A-GLANCE

- Toxoplasmosis is an infection caused by the parasite *Toxoplasma gondii*. While exposure to the parasite is fairly common, infections are rare
- Cats are the primary hosts for toxoplasma, but in the U.S., humans typically acquire the infection through raw or undercooked meat, unwashed fruits and vegetables, and contaminated water or soil
- In households with cats, human family members, including pregnant women, should follow common sense hygiene precautions to avoid potential exposure to toxoplasma

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Many people familiar with toxoplasmosis, which is a zoonotic infection caused by the *Toxoplasma gondii* parasite, assume humans contract the illness from cats. This persistent misconception gives feline companions an undeserved bad rap.

Yes, Cats Are the Primary Hosts for Toxoplasma

The *T. gondii* parasite is found in a wide variety of birds and mammals, but it can only reproduce inside cats, which are the primary host.

Estimates are that 30 percent of cats and dogs in the U.S., as well as 25 to 50 percent of Americans have been exposed. But while exposure to the parasite is fairly common, infection and clinical disease is rare.

The most common route of exposure for kitties is through contact with infected prey, typically rodents and birds. Once inside a cat's intestines, *T. gondii* produces millions of oocysts that complete their life cycle in the GI tract and re-enter the environment in the cat's feces.

Oocysts can live more than 18 months in soil and water, which is how the parasite is transmitted to animals such as rodents, sheep, and pigs.

Unless your indoor kitty encounters an infected rodent inside your house, there's really no way for her to contract the parasite.

There Are Many Other Avenues of Infection

What many people don't realize is that cats are only one source of several avenues of a toxoplasma infection, and in fact, cat ownership isn't even a common way for humans to acquire toxoplasmosis. According to veterinary publication *dvm360*:

"... [Y]es, cats do shed the parasites in their stool. But the chances of the pathogens being passed on to humans are slimmer than most people have been led to believe by hyped-up media reports."¹

In the U.S., humans are most often exposed to *T. gondii* through raw or undercooked meat, unwashed fruits and veggies, and contaminated water or soil. Animals are exposed by eating contaminated meat, ingesting contaminated feces or water, or through congenital infection across the placenta.

I've only seen one case of toxoplasmosis in my veterinary career, and it was in a dog, not a cat. The dog had eaten freshly hunted rabbit meat. I always recommend freezing fresh game before feeding the meat to a pet. Freezing meat for 24 hours kill toxoplasma.

Most cats are infected across the placenta or by nursing. Many of these kittens are stillborn or die shortly after birth. Those that survive often suffer from inflammation of the brain, lungs, or liver.

Toxoplasmosis in adult cats is rare. The infection is typically seen in cats never exposed to *T. gondii*, those who sustain an overwhelming exposure to the parasite, or cats with compromised immune systems.

Symptoms of a Toxoplasma Infection

Toxoplasmosis in pets can be acute or chronic. The acute form usually results in symptoms; often the chronic form is a low-grade disease that is asymptomatic.

More cats than dogs show symptoms of infection. And although any dog can be infected by the parasite, it's usually seen in young dogs with immature or compromised immune systems. There can be multiple symptoms of a toxoplasma infection, including:

- Seizures
- Fever
- Tremors
- Weight loss
- Depression
- Loss of appetite
- Lethargy
- Vomiting
- Muscle weakness
- Diarrhea
- Loss of coordination

- Jaundice (yellowing of the skin)
- Paralysis
- Inflammation of the tonsils
- Shortness of breath
- Inflammation of the retina, iris, or cornea

Diagnosis and Treatment of Toxoplasmosis

The best way to diagnose toxoplasmosis is to measure the existence of antibodies to the organism with the toxoplasma IgG and IgM antibody test.

Other helpful diagnostic tests can include a complete blood count, a blood chemistry panel, urinalysis, fecal analysis, an eye exam, an ELISA test, chest X-rays, cerebrospinal fluid analysis, and analysis of chest or abdominal fluid.

Treatment of serious cases of toxoplasmosis can include antibiotics, anticonvulsants in patients with seizures, supportive care of affected organ systems, and in some cases, intravenous (IV) fluids.

However, I have successfully treated non-life threatening cases of chronic toxoplasmosis with a variety of natural remedies including Barberry and berberine HCL, Otoba bark extract, Cinchona extract, and Olive leaf extract. Ozone therapy may also be beneficial for chronically ill patients.

Do Cats Pose a Danger to Pregnant Women?

In a word, no! This is a question many veterinarians get from pregnant cat owners concerned about toxoplasmosis.

If you're pregnant and share your home with one or more kitties, assign litterbox chores to someone else in the family for the duration of your pregnancy.

If you also have a dog, make sure he doesn't snack on cat poop (as many dogs like to do).

Additional Common Sense Precautions

Other things you and family members can do to reduce your exposure to *T. gondii*:

- Cover outdoor sandboxes when not in use to keep kitties from using them as litter boxes
- Wear gloves when gardening or doing yard work
- Wear disposable gloves to clean the litterbox and also a face mask if you happen to be immunosuppressed
- Keep the litter box in pristine condition. The longer infected cat poop sits in the litter box, the higher the risk that the eggs of the parasite will become infective

According to Dr. Heather Fritz, veterinary parasitologist at Washington State University:

"You stand a greater chance of contracting toxoplasmosis by drinking contaminated water or eating contaminated meat that's raw or inadequately cooked, than getting it from your cat — especially if it's an indoor cat."

An infected cat "... will only excrete the oocysts in its feces for three weeks or so — and typically only once during its lifetime," Fritz concludes.²

Bottom line: there's no need to get rid of your cat! Just practice good hygiene habits such as handling meat properly, and cleaning the litterbox frequently using gloves.

Sources and References

[dvm360 August 20, 2015](#)

^{1,2} [dvm360, August 20, 2015](#)
